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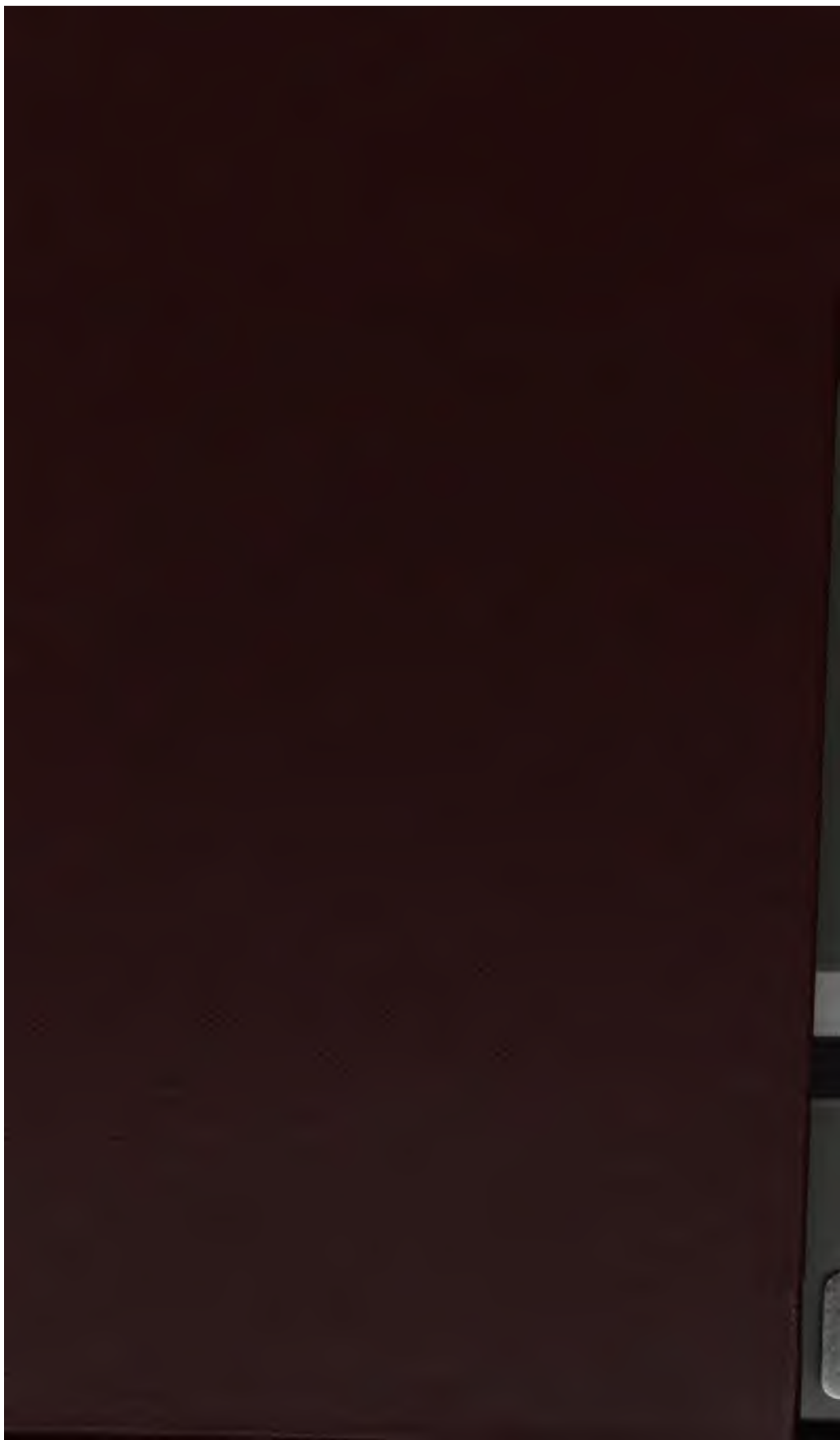
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THE  
VOYAGE AND SHIPWRECK  
OF  
ST. PAUL.

LONDON :  
SPOTTISWOODE and SHAW,  
New-street-Square.





Illustration of the schooner "The Fish Hawk"

Illustration of the schooner "The Fish Hawk"

VOYAGE AND SHIPWRECK

ST. PAUL:

WITH DESCRIPTIONS OF  
THE SOURCES OF THE RIVER ST. LAURENCE,  
AND  
THE SHIPS AND NAVIGATION.

JAMES SMITH, ESQ., OF DORSET, IN THE COUNTY OF DORSET.



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THE

**VOYAGE AND SHIPWRECK**

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**ST. PAUL:**

WITH DISSERTATIONS ON

THE SOURCES OF THE WRITINGS OF ST. LUKE,

AND

THE SHIPS AND NAVIGATION OF THE ANTIENTS.

BY

**JAMES SMITH, ESQ., OF JORDANHILL, F.R.S., &c.**



39

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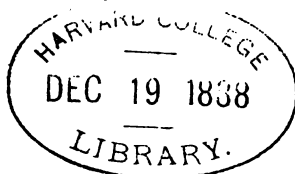
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## INTRODUCTION.

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TRADITION, from time immemorial, has pointed out a bay in the island of Malta as the scene of St. Paul's shipwreck. It has never been known by any other name than "Cala di S. Paolo," or St. Paul's Bay. There is no mode of perpetuating the memory of events more effectual than that of naming places after them; but, although we can scarcely have a stronger case of traditional evidence than the present, in the following inquiry I attach no weight to it whatever. I do not even assume the authenticity of the narrative of the voyage and shipwreck contained in the Acts of the Apostles, but scrutinise St. Luke's account of the voyage precisely as I would those of Baffin or Middleton\*, or of any antient voyage of doubtful authority, or involving

\* At the commencement of this century the accounts of those two navigators were held to be apocryphal, and their discoveries expunged from our maps; but in both cases their veracity has been established by the same process to which I am subjecting the account of St. Luke: the localities have been examined by subsequent visitors, and found to agree with the narratives.

points on which controversies have been raised. A searching comparison of the narrative, with the localities where the events so circumstantially related are said to have taken place, with the aids which recent advances in our knowledge of the geography and the navigation of the eastern part of the Mediterranean supply, accounts for every transaction — clears up every difficulty — and exhibits an agreement so perfect in all its parts as to admit but of one explanation, namely, that it is a narrative of real events, written by one personally engaged in them, and that the tradition respecting the locality is true.

Although many volumes have been written upon a question connected with this voyage, namely, whether St. Paul was wrecked at Malta or Meleda in the Adriatic, I am not aware that any such comparison as the one I am about to attempt has yet been made\*; none, indeed, could have been made with success in the hitherto imperfect state of our knowledge of the geography of the Levant, and of the ships and seamanship of the

\* Boysen, "De difficili Pauli Itinere," with a promising title, throws no light on the subject. Major Rennel's paper, "On the Voyage and Place of Shipwreck of St. Paul" (*Archæologia*, vol. xxi.), belongs to the series of works on the controversy above alluded to. He had no personal knowledge of the supposed locality, and therefore had to contend with imaginary difficulties. It is written with that caution and candour which distinguishes him. The conclusion he has arrived at is, as might be expected, that Malta was the scene of the shipwreck.

antients. For all purposes of minute comparison, our acquaintance with either of these subjects was worse than useless, and only calculated to mislead. Nothing, for instance, could be more erroneous than the charts of the south coast of Crete, where so many events of importance to the right understanding of the occurrences of the voyage took place, or of Malta, where it terminated in shipwreck.\*

Had the geographers of former days been contented, without filling up conjecturally the spaces in their maps, about which they were ignorant, or only given us "elephants instead of towns," we should have had but little reason to complain; but they more frequently did the very reverse, and gave us towns instead of elephants. In one of the French Admiralty charts of 1738, the southern promontory of Crete, now called Cape Matala, and the great bight (the Gulf of Messara) to the west of it, are altogether omitted, and the line of the coast represented as nearly straight. On the other hand, Sanson, in his great map of Crete†, "E

\* Dr. Bloomfield, in his "Recensio Synoptica," refers to the map of Malta of Cluverius, for the spit of land which forms the place where two seas meet (τοπον διθαλασσον). The spit, or "ness," is evidently the present site of Valetta; but the map has scarcely any resemblance to Malta.

† Appended to "Meursii Creta," *Opera*, iii. 143. In Dapper's map (*Description de l'Archipel*, p. 385.) there is neither cape nor bight. Fair Havens and the city of Lasea are placed at the east end of Crete; and Claudos (the island of Claudia),

Conatibus Geographicis," as it is entitled, exhibits projections and indentations where none really exist; and in particular he has represented an extensive promontory in the centre of the Gulf of Messara, upon which he has placed the town of Assos, evidently for the purpose of accommodating his Geography to the narrative of St. Luke; so that, whether we translate the word "ασσον" (Acts, xxvii. 13.) into "Assos," as it is rendered in the Vulgate, or "close by," as in the English translation, we are sure that the account and map will agree with each other.

Recent surveys have, however, corrected these errors, and furnished us with a correct outline of the coasts of Crete.\* The soundings are not yet filled in; but this is immaterial in the earlier proceedings of St. Paul and his companions. At Malta, where we require to know not only the outline and peculiar features of the coast, but the soundings and nature of the bottom, we have Captain Smyth's chart of the island, and, above all, his plan of

according to the longitude of Ptolemy, at the opposite extremity.

\* The British survey now carrying on has not yet extended to the south coast of Candia. I am, however, assured by officers engaged in it that the coast lines of the late French Admiralty chart are extremely accurate. I have accordingly made use of it in the chart of the south coast of Crete; I have also used it in that part of the general chart of the voyage which lies to the east of long. 24°, the meridian where Captain Smyth's chart of the "western division of the Mediterranean Sea" terminates.

St. Paul's Bay, to a scale of 8-6 inches to the mile\*, which leave nothing to be desired with regard to the hydrography of this part of the voyage.

Next in importance to a correct knowledge of the geography is that of the peculiarities of antient navigation; but there is no department of classical antiquity about which we are so much in the dark. I have not met with any modern author on the subject who has not left it more obscure than he found it, chiefly from a want of practical knowledge of the science.† Translators and commentators have necessarily had recourse to the writings

\* I question if modern science has ever done more to confirm an antient author than Captain Smyth's survey of St. Paul's Bay has done in the present case. The soundings alone would have furnished a conclusive test of the truth of the narrative. To the common reader, the mention of twenty fathoms and fifteen fathoms indicates nothing more than the decreasing depth which every ship experiences in approaching the land; but when we come to consider the number of conditions which must be fulfilled in both instances where the depth is mentioned, in order to make the chart and narrative agree, we must admit that a perfect agreement cannot be accidental. I refer the reader for the details of the coincidences to the Narrative of the Voyage; and take this opportunity of acknowledging the kindness with which Captain Smyth allows me to copy his chart, and at the same time of stating his approbation of the manner in which I have reduced it, to illustrate this work.

† M. Jal, author of a late work entitled "*Archæologie Navale*," and Captain Beechey, R. N., are to be excepted from this last remark; but M. Jal is rather a mediæval than a classical antiquary; and Captain Beechey's remarks on antient ships, appended to his travels in Africa, are avowedly taken from Potter. His observations on the rate of sailing of antient ships are, however, valuable, and I have availed myself of them.



of authors who have treated *de re navali antiqua* as authorities ; and the consequence is, that there is scarcely a single nautical term in the narrative which is correctly rendered, and even when one is, the reader has no certainty that the meaning is the right one, for he will rarely find two commentators agreed in opinion respecting it.

We are not, however, to suppose that men of learning and research offer conjectures at random ; all of them have some grounds to go upon, and it is only by testing their conclusions by a careful examination of the data upon which they rest them, and by rejecting such as we can prove to be erroneous, that we can hope to arrive at the true explanation of the terms. This I have attempted ; but I found it a work of much greater labour than I anticipated. Even the verification of quotations is anything but an easy task ; we often meet with errors in the references, and every antient author has not a verbal index to guide us in searching for passages.

But it is not enough to discover the passages, or even to assure ourselves, from the context, that we understand the meaning of the author ; we must, by comparing him with other authorities, satisfy ourselves that he understood what he was writing about, and is correct in his terminology. Those who trust implicitly to antient authors will not infrequently be led into error, particularly where the object is to arrive at the meaning of tech-

nical expressions. The antient scholiasts and lexicographers, and writers *de omnibus rebus* like Julius Pollux and Isidore of Seville, cannot always be right in their explanations, and I should consider inferences drawn from their works of little value, unless supported by independent collateral evidence. But if caution be requisite with regard to the writings of the antients, it is still more so with regard to the engravings of representations of antient ships on coins, marbles, and pictures. To the nautical antiquary the engraved figures, particularly of coins, are of little value, except to guide him to the originals.

It has been my object, in every instance where it was in my power, to get at the best evidence. I cannot accuse myself of want of industry in the research, and I have been placed in circumstances in some respects peculiarly favourable for prosecuting it.

A winter's residence in Malta afforded me ample opportunities for a personal examination of the localities. In the ships of war stationed there, I could consult with skilful and scientific seamen, familiar with the navigation of the Levant, an advantage I did not fail to avail myself of; and as it is my object to put my readers in possession of my authorities, I have never scrupled to name them. In the Knights' Library I had access to an extensive collection of works, printed and manuscript, on the controversy as to the scene of the ship-

wreck, on the hydrography of the Mediterranean, and on local and classical antiquities. The following summer I spent on the Continent, and devoted my time almost exclusively to the investigation, with the advantages which the museums and libraries of Naples, Florence, Lausanne, and Paris afforded. Since my return, I have continued it with the advantages our own country possesses, particularly in the libraries and medal rooms of the British Museum and Records of the Admiralty\*, and with a private library which I may term rich in early sea voyages, formed in a great measure for the purpose of illustrating geographical and nautical antiquities, and with the means of testing experimentally the soundness of my conjectures as to the internal arrangements of antient ships.

It is not enough, however, to be placed in a position favourable for observation, in order to arrive at just conclusions: we must also know "what to observe" and "how to observe;" but the power of doing so with advantage depends in a great measure upon practice, and I think it is due to the reader to state, that none of the channels into which my inquiries on the subject have branched are altogether new to me. I have, in the first place, endeavoured to identify the locality

\* It will be seen that the record of the proceedings of a court-martial on the officers of a frigate wrecked in St. Paul's Bay, furnished very important information, bearing directly on the subject.

of a shipwreck which took place eighteen centuries ago. An attempt to do this would be of little value, unless the geological changes to which sea coasts are liable, which may or must have occurred in the interval, are taken into account. Now, it so happens that this is a department of geology which I have been engaged many years in investigating.

In like manner, it would be hardly possible to reconstruct the history of a sea voyage out of such scattered and fragmentary notices as we find in the narrative of St. Luke, without some practical knowledge of navigation and seamanship. My knowledge of these subjects is only that of an amateur, yet a yacht sailor of more than thirty years' standing can scarcely fail to have acquired some skill in those principles of nautical science which are common to all times, although he may not always express them in the appropriate language of the quarter-deck. I find, at all events, the knowledge I have thus acquired enables me to consult my nautical friends with advantage. But nautical skill, whether original or borrowed, will not tell us how Greek and Roman vessels, so different from the moderns in rigging and construction, should be managed under given circumstances. Here, also, former pursuits come to my aid. Nautical antiquities have long been a favourite study, and not a little practical experience in planning, building, and altering vessels, has given

me definite notions both of external form and internal capabilities, whilst the opportunity of testing my conclusions by experiment, and the success of those I have made, gives me confidence in their accuracy.

I have felt some hesitation in dwelling upon the advantages I possess for conducting such inquiries with success, which are in a certain degree personal, and I turn with satisfaction to those I have derived from recent antiquarian discoveries, from the pictures and marbles exhumed at Herculaneum and Pompeii, and especially from the discovery of the inventories of the Athenian fleet, which were excavated at the Piræus, in 1834. These last are inscribed upon marble tables: they have been published by Professor Böckh, of Berlin, well known for his researches on Attic antiquities, and his great collection of Greek inscriptions. Nothing can be more satisfactory than the manner in which he has edited these important fragments.

He has, in the first place printed the tables in inscription characters. He has next printed them in the common Greek type, with the lacunæ filled up conjecturally within brackets, as far as that could be done with tolerable certainty, and he has accompanied them with notes and preliminary dissertations.\* It will be seen that I frequently

\* The title of the work is, "Urkunden über das Seewesen des Attischen Staates hergestellt und erläutert von August Böckh," 8vo, Ber. 1840: *i. e.* Archives of the Navy of the Attic States. I have quoted them as "Attic Tables."

dissent from his nautical inferences, but this difference of opinion by no means lessens my sense of the care and fidelity with which he has executed his editorial labours. These tables contain, in the most authentic form, much information on nautical matters, calculated to throw light on difficult and unexplained passages, both in the sacred and profane writers of antiquity.

We are also indebted to M. Jal for having brought forward, in his "*Archæologie Navale*," some important documents respecting the shipping of the middle ages. They furnish a valuable link connecting the modern and antient nautical language, which I have not failed to avail myself of.

If, therefore, I have succeeded in clearing up unexplained passages in the sacred historians, or other antient writers, my success must be ascribed, in a great measure, to discoveries unknown to the authors who preceded me in the same lines of inquiry.

My original intention was to have confined myself to the illustration of St. Paul's voyage, and that the work should have been, in the strictest sense of the word, a monograph; that my antiquarian researches should have been confined to the wheat ships of Alexandria, and my critical researches to the nautical style of St. Luke. I could not, however, in searching for evidence regarding the merchant ships of the antients, avoid noticing that which regarded the war galleys also,

and I could not resist the temptation of attempting a solution of what Dr. Arnold has called "an indiscoverable problem," \* namely, the internal arrangement of the rowers.

I have also extended my inquiries respecting the writings of St. Luke much beyond my original intention. In comparing his nautical style with that of other authors, antient and modern, I was led to a minute examination of his account of the miracle of stilling the tempest on the Lake of Genesareth, as compared with those given of the same event in the Gospels of St. Matthew and St. Mark.

With this view I copied them out in the original in parallel columns, placing St. Luke's account, which it was my object to elucidate, in the centre. After repeated transcriptions, I succeeded in adjusting them so as to exhibit at a glance its relation to each of the other two. The results of this comparison were to me unexpected, but in the highest degree interesting and satisfactory. I found I had unintentionally been led to place in juxtaposition the passages which were, perhaps, of all others best calculated to show us what were the authorities which St. Luke had made use of in this part of his Gospel. In the parallel passages of St. Matthew and St. Mark, we have all the data, and nothing but the data, which he has employed. There is here no disturbing cause to perplex us, such as the

\* Roman Hist. iii. 572.

employment of authorities which have perished, or of information procured by personal inquiry. We are thus introduced, as it were, into his study. We see the two rolls from which he composed his narrative open before us. One of these, which is in Greek, is the Gospel according to St. Matthew ; the other is in the language of the country (Syro-Chaldaic, or Aramaic, called by the fathers Hebrew). The original employed by St. Luke, it is true, is no longer extant, but we have what I believe to be a close and literal translation of it in the Gospel of St. Mark.

By thus placing the writings of the first three Evangelists in a new point of view, and employing a new instrument of examination, if I may be allowed the expression, I cannot help thinking that I have succeeded in throwing new light on the origin of their Gospels. I say, a new instrument of examination : for it was the contrast between the *landsmanlike* style in which St. Matthew describes the storm and its effects, and the accurate but provincial style of the fisherman of the lake apparent in St. Mark's account, and the equally accurate but less provincial and more historical style in which St. Luke, in a narrative evidently constructed from the other two, relates the ~~same~~ occurrence, which first arrested my attention. This led me to examine into the nature of the connection of the accounts given of this miracle by St. Luke and St. Mark. The conclusion at which I arrived



was, that St. Mark is the translator of a contemporary account by an eye-witness, and that St. Luke has based his account of the miracle, not upon St. Mark's translation, but upon this original narrative, supplying some particulars from St. Matthew's Gospel in Greek.

An important question here presented itself: if St. Mark be a translator, whom did he translate? The answer which I have endeavoured to establish, both by internal and external evidence, I give in the words of Papias and other antient fathers: "Mark is the translator of Peter" (*Μαρκος ἑρμηνεύτης Πέτρου*), not, as some of those writers have, as I think erroneously supposed, that he was the translator of what St. Peter remembered and dictated at a distance of years, but that a considerable part of St. Mark's Gospel is a translation of an account of the transactions in which St. Peter was personally engaged, written by St. Peter himself upon the spot, immediately after the events took place which he has recorded.

Since writing the above, I have seen some remarks on this subject by the translator\* of Schleiermacher's "Critical Essay on the Gospel of St. Luke," in which he points out the importance of examining it in every point of view, and anticipates the probability that the right clew may thus be discovered. He says:—

"That a problem so complicated may not yet have been

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\* I believe Dr. Thirlwall, now Bishop of St. David's.

viewed from every possible side ; and, therefore, that the right clew may still be discovered, is not in itself improbable." \*

Now, independently of all the proofs which I have brought forward in support of my view of the authorship of the original documents, and the use which has been made of them by St. Luke, I cannot help thinking that I have got possession of the right clew, when I feel the ground so firm under me — when I feel that in every step I have taken, difficulties have disappeared — when I feel assured that I am not wandering amongst the mists of myths, legends, or early traditions, but amidst the clear light of the best of all historical evidence, that of the contemporary accounts of the persons actually engaged in the transactions which they have recorded.

Although it does not come within the plan of this work to discuss the bearing of the conclusions I have arrived at, on the question of the genuineness or authenticity of the writings of St. Luke, there is one remark which, as it depends on the peculiarities of the nautical style of the Acts of the Apostles, I wish here to make. That style, as I shall have occasion more than once to observe, though accurate, is unprofessional. No sailor would have written in a style so little like that of a sailor; no man not a sailor could have written a narrative of a sea voyage so consistent in all its parts, unless from actual observation. This peculiarity of style

\* Introduction, p. xxii.

is to me, in itself, a demonstration that the narrative of the voyage is an account of real events, written by an eyewitness. A similar remark may be made on the geographical details. They must have been taken from actual observation, for the geographical knowledge of the age was not such as to enable a writer to be so minutely accurate in any other way.

There is one objection to the locality assigned by the Maltese tradition as the scene of the shipwreck, which meets us at the very threshold of our inquiry, and which it is necessary to obviate in a work which aims at exhausting the subject. It is maintained by Giorgi, Bryant, Falconer, and others, that it did not take place at Malta at all, but at Meleda, in the Gulf of Venice, an island which was antiently known by the same name as Malta, namely, Melita.

But for the above-mentioned reason, I should have been much inclined to have noticed this objection very briefly, thinking, with Joseph Scaliger, "That it would not deserve to be confuted, if it had not had supporters."\* But when I find it adopted by modern commentators† and biographers‡, and read such passages as the subjoined§, I feel called upon to subject the argu-

\* "Hæc ridicula opinio, si non sectatores nacta esset, indigna erat quæ vel confutaretur."—*De Emendatione Temporum*, p. 536.

† Dr. Valpy, in his edition of the New Testament.

‡ Chalmers's Biog. Dict. art. "Bryant."

§ "On sait bien aujourd'hui, à ne plus en douter, que c'est l'île de Meleda dans la Mer Adriatique, sur la côte de la Dal-

ments by which it is supported to a minute and sifting examination. This I have attempted to do, following the reasoning of Bryant and Falconer, as best known in this country. I have not, however, left any of the arguments of foreign writers on the subject, who have adopted the same side of the question, unnoticed or unanswered.

Jordanhill, 12th March, 1848.

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matie, et qui faisait autrefois partie de la république de Raguse, où St. Paul fit naufrage." — *Corresp. de Bar. Zach*, ix. 78.

"The most celebrated treatise with which we are acquainted is that of Mr. Bryant, who has defended his opinion at great length with all his usual learning, and more than his usual judgment, and in the general opinion, I believe, has been supposed to have established his position." — *Townsend's New Testament, arranged in Chronological Order*, ii. 445.

"The course of this voyage, related Acts xxvii., in which the Apostle was shipwrecked on the island of Melita, Acts xxviii. 1., has been mistaken by the first geographers and commentators, and their maps of it erroneously constructed, in consequence of the vulgar error that the island in question was the African Melita or Malta, instead of the Adriatic Melita or Meleda. This correction of the received geography we owe to the sagacious Bryant; and it has recently been established with much learning and ability by a layman, in a dissertation on this voyage, Oxford, 1817, the ingenious Dr. Falconer, the physician of Bath, who has furnished a correcter map of the voyage." — *Hales, Chronology*, iv. 406.

"This (Malta) is not the Melita where St. Paul was wrecked." — *Lord Lindsay's Letters from Egypt and the Holy Land*, i. 19.

## DIRECTIONS TO THE BINDER.

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### VIEWS.

#### I. Frontispiece. "The situation of the ship on the fifteenth morning."

Antient ship anchored by the stern in St. Paul's Bay in a gale from E.N.E. Background, Salmonetta Island, on the left, under two sea-fowl, a place where two seas meet (τοπον διθαλασσον, Acts xxvii. 41.), to which the ship must be driven. This illustration represents the situation of the ship at the moment described in verse 40., when the crew are cutting away the anchors (τας αγκυρας περιελοντες), loosing the bands of the rudders (ανεντες τας ζευκτηριας των πηδαλιων), and hoisting the artemon (επαραντες τον αρτεμονα).

I am indebted to the talented marine painter, Mr. Smartly\* of St. Heliers, for having combined artistical effect with the most rigid adherence to the authorities I furnished him with, and as it is my object in every case to put my reader in possession of the evidence upon which my conclusions are founded, I shall here enumerate them.

In the first place, I showed him on the chart the situation in which the ship must have been anchored, and the direction of the wind. He has represented the sea as it must have been running at the time, certainly without exaggeration; the dark clouds indicate the coming rain; whilst a gleam of the morning sun illuminates the sail (Artemon) which the crew are hoisting, the gilded chenisus (χρυσεος χηνισκος), and the

"Carchesium late splendens."

The background is taken from the view page 102., and the ship from the following authorities:—

\* Mr. Smartly's name, and that of his father, have been printed by mistake "Hartley" at page 65.

- 1st. The ship of Theseus from Herculaneum, see figure at page 169.
- 2d. The ship on the tomb at Pompeii, figured at page 168.
- 3d. The African wheat ship, from a coin of Commodus, figured at page 162.
- 4th. The shrouds which support the mast, with the blocks for setting them up, are taken from a coin figured in Montfaucon, iv. pl. 143.
- 5th. The undergirding was represented from the directions of the father of the artist, the only naval officer I have met with who had actually seen a ship undergirded.

For the reasons for anchoring the ship by the stern, which this view is meant to illustrate, see page 92.

- II. "Fair Havens, Crete." From a view taken on the spot, by Signor Antonio Schranz of Valetta. Page 44.
- III. "Koura Point, with the Tower and Battery of the University." Page 80.

I have given this, without alteration, from the views of headlands which illustrate Captain Smyth's chart. This is the eastern entrance of St. Paul's Bay: a ship could not pass it in the night without the seamen perceiving the breakers before they perceived the land. This explains the passage in v. 27. — "The shipmen deemed they drew near to some country."

- IV. "St. Paul's Bay, Malta, from the South." From a view taken on the spot by the author. Page 102.

This view represents Selmoon Island, and the narrow channel which separates it from the Main, and which renders the description of St. Luke, "a place where two seas meet" (*τοπον διθαλασσον*), so strikingly appropriate.

## CHARTS.

- 1st. General Chart, page 19.

Constructed on Mercator's projection, in order to give the true bearings. To the west of longitude  $24^{\circ}$ , it is taken from the English admiralty chart by Captain Smyth. To



the east of that longitude it is taken from the French admiralty chart, as being the latest.

2d. "Part of the South Coast of Crete." Page 56.

From the French admiralty chart of the eastern part of the Mediterranean, from recent surveys. The dotted line, to the east of Fair Havens, marks the traverses which a ship, approaching it from the east, with a north-west wind, would have to make. From that to the point where the compass lines intersect each other, the dotted line represents the course of a ship leaving Fair Havens for the port of Phenice, with a south wind. This point must be near the place where St. Paul's ship encountered the Typhoon. From thence she was driven to Clauda, and beyond it, to about longitude  $24^{\circ}$  E.; from thence the course must have been in the direction of Malta.

3d. "St. Paul's Bay." By Capt. Smyth, R.N., F.R.S. page 88.

This chart is reduced from a scale of 8-6 in. to the mile to 5 inches, to suit the size of the volume. The three parallel lines, which cross the entrance of the bay, represent a zone, within the limits of which a ship driven into the bay from Clauda must have been from the time the crew became aware of the vicinity of land till the ship was brought to anchor. If she had been to the north of the northmost line she would have been driven past the bay; if to the south of the southmost, she could not have entered it; the centre line is the mean between these, representing the most probable track of the ship. This zone is crossed by two curved dotted lines; that to the west of the point of Koura represents the depth of twenty fathoms; that to the east of Salmonetta island, the depth of fifteen fathoms. The centre of the compass laid down on the chart, represents the place where the ship is supposed to have anchored.

WOOD-CUTS.

Vignette on the title page. Coin of the Emperor Commodus (large brass), representing an African wheat-ship under sail, from the Cabinet du Roi. See page 163.

Page 151. Figure of a Ship taken from an antient bath, in the Borghese Collection, by M. Jal, Arch. Nav. i. 21.

- Page 162. An African wheat-ship under sail, from a coin of the Emperor Commodus, in the Museum at Avignon, from a drawing by the author.
168. Ship on the tomb of Nævoleia Tyche, at Pompeii, from sketches and measurements made on the spot by the author.
169. The Ship of Theseus from the *Pitture Antiche d' Ercolano*, t. ii. tav. xiv. p. 91.
172. Antient Anchor, engraved from a sulphur impression of a coin of Adrian in the British Museum.
193. War Gallies, from coins of Adrian; the one under sail in the Cabinet du Roi, the other (a bireme) in the British Museum.

The diagrams at page 194. and 198. represent the supposed position of the Oars in Triremes and Quinqueremes.

The sketch of Port Phenice, now Lutro, at page 50., is taken from one of the French admiralty charts, of the date of 1738, in the Knights' library at Malta.

#### ERRATA.

Page 25. line 17. for "Crete" read "Cyprus."

65. line 18. &c., for "Hartley" read "Smartly."

89. note, for "Valetta" read "the east end of Malta."

167. line 11. and 173. line 17. for "ξυλωνη" read "ξυλωνα."

301. line 20. for "Bökh" read "Böckh."

„ line 24. for "ξυλινη" read "ξυλινα."

„ line 24. for "κρεμαστη" read "κρεμαστα."

NOTICES  
OF THE  
LIFE AND WRITINGS OF ST. LUKE.

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ST. LUKE, the companion of St. Paul, and historian of the voyage, was, by the concurring voice of antiquity, a native of Antioch. Eusebius says that he was by birth an Antiochean\*, and Jerome that he was “a physician of Antioch, as his writings show.”† If this reason, given by Jerome, refers to his country, and not to his profession, he probably alludes to some peculiarities of idiom, and we can easily understand that an author, who lived at a time when the language was still spoken, and who wrote on the Cilicisms of St. Paul, could detect Antiocheanisms in the language of St. Luke; but there are other indications in his writings, not de-

\* Λουκάς δὲ τοῦ μὲν γένους ὡν τῶν ἀπ’ Ἀντιοχείας. — Hist. Eccl. lib. iii., cap. 4.

† “Lucas medicus Antiochensis ut ejus scripta indicant.” — *Opera*, i. 280.

pending upon idiomatical expression, which seem to prove that he was an Antiochean. The first which I can find is in his enumeration of the seven deacons (Acts, vi. 5.). He stops to tell us that Nicolas was "a proselyte of Antioch." As he does not mention the country of any of the others, or indeed say a word about any of them, except Stephen, whose martyrdom he was about to record, the notice appears to be dictated by national feeling.

From the manner in which he relates the events which took place at Antioch, when the early disciples visited it after the persecution which arose about Stephen (Acts, xi. 19.), I think it extremely probable that he was resident there at the time. He never, indeed, mentions himself, but every touch in his representation shows Antioch in the foreground. The men of Cyprus and Cyrene *come to* (εἰσελθόντες) Antioch (xi. 20.); Barnabas *goes from* it (ἐξῆλθε) to Tarsus (ver. 25.), and *brings* Saul to Antioch. Prophets *come* from Jerusalem to Antioch (ver. 26, 27.); relief is *sent* to the brethren in Judea, by Barnabas and Saul (ver. 30.); and after narrating the persecutions of Herod, and his death, he tells us, without any preface, that Barnabas and Saul *returned from* Jerusalem (xii. 25.). This is the language of a man writing at Antioch, or at least with Antioch uppermost in his thoughts.

There are also minute circumstances mentioned in connexion with Antioch, which are such as would

be noticed by an eye-witness only. Thus, he mentions the places from whence the disciples came, and distinguishes those who addressed the Jews, from those who addressed the Grecians. He also mentions the names of certain Antiocheans, men of consequence, no doubt, in their own city, but never heard of elsewhere. All this points to the conclusion that he was connected with that city.

We have better evidence as to his profession. There can be little doubt but that it is he who is mentioned by St. Paul, as "Luke, the beloved physician" (Coloss. iv. 14.). Eusebius, in the above-cited passage, adds that he was a physician; and Jerome, in stating the same thing, refers to ecclesiastical historians as his authorities.\* This testimony is fully confirmed by the internal evidence furnished by his writings. Medical men, familiar with the writings of the Greek physicians, have observed, that when he mentions diseases, both in his Gospel and in the Acts, he generally uses the appropriate medical terms.†

In the narrative of the voyage, as well as in the comparison I have hereafter to make of his writings with those of the first two evangelists, I shall have

\* Την δε επιστημην ιατρος. — Euseb. ubi supra.

"Evangelistam Lucam tradunt ecclesiæ tractatores medicinæ artis fuisse scientissimum." — *Com. in Isaiam*, cap. 3.

† See Freind, *Historia Medicinæ*, p. 438. See also an excellent paper by Mr. J. K. Walker, on the medical style of St. Luke, *Gent. Mag.*, June 1841, p. 585.

frequent occasion to notice instances of this characteristic of his style.

We have no means of knowing more of his personal history till he joined St. Paul. He speaks in the first person plural for the first time when the apostle, after parting from Barnabas, came to Troas (Acts, xvi. 10.). I am, however, of opinion that he joined him at a much earlier period, and accompanied him in the journey which he made with Barnabas, narrated in Acts, xiii. and xiv. I infer this from the circumstantiality with which it is related. He tells us, in the first place, that they went to Seleucia (xiii. 4.), but nothing is said as to what happened there. Now, this is exactly the way he speaks when we know that he actually was with St. Paul on his journey (see xvi. 11.); at Salamis nothing happens except that they preached to the Jews; but as they appear to have done this constantly, it would scarcely have been mentioned, had the author not been present. They afterwards proceed to Paphos, which is at the opposite end of the island of Cyprus from Salamis, hence the propriety of the word "*διελθόντες*" (xiii. 6.), "*passing through*" it, naturally used by one who had made the journey. At Paphos the notices of the particular species of blindness with which Elymas was affected "*αχλυσ* \* *και σκοτος*," and the groping

\* Galen, who wrote after the time of St. Luke, states that a certain disorder of the eye is called *αχλυσ*. See Mr. Walker's paper above quoted.

for assistance, mark at once the physician and the eye-witness. The whole of this journey is described with the same degree of circumstantiality which St. Luke invariably uses when we know he was present, and which renders it more than probable that he accompanied the apostle. He appears to have remained at Antioch after his return (xiv. 26.), till Paul and Silas finally left it (xv. 40.). There is nothing in the account of the journey which Paul and Barnabas made to Jerusalem to indicate that he accompanied them. He tells us, indeed, that they passed through Phenice and Samaria, where we do not hear of any thing being done; but it is probable that he attended them so far, for he informs us that they were "brought on their way by the Church" (xv. 3.).

After St. Paul left Antioch, St. Luke appears to have proceeded to Troas, where the apostle meets him; and here it escapes from him that he was engaged along with St. Paul in preaching the Gospel, for he gathers from St. Paul's vision, that "the Lord called *us* to preach," &c. (xvi. 10.) From Troas he accompanies the apostle to Philippi. The circumstantiality with which he relates this short voyage is peculiarly characteristic of his mode of writing when he was actually present, and forms a strong contrast with the manner in which he describes the previous journey of St. Paul (xvi. 6, 7, 8.); and not less characteristic of his style is the correct nautical language which he employs. He tells us,



that "*weighing* \* from Troas, they *ran straight* † to *Samothracia*, and the next day to Philippi; . . . and we were in that city several days, and *on the Sabbath* we went out of the city *by a river side*, where prayer was wont to be made," &c. We do not require here to be told that the author was present.

At this city St. Luke probably remained till the apostle rejoined him at the end of several years. He again accompanies St. Paul, and relates their subsequent voyages with the same circumstantiality, and in the same appropriate terms, which he had used in the previous narration. In the former voyage from Troas to Philippi, he only takes two, or, at most, three days. On his return he takes five; but a single word explains the cause of the difference in the quick passage — they "*ran straight*," or with a fair wind. From this time we can trace every day's work in their voyage through the islands of the Ægean Sea. At Patara, where they change ship, the ship in which they embark is said to be (*διαπερων*, xxi. 2.) crossing over, in the present tense, as if taken from a journal written during the voyage. The notice of Cyprus, *αναφανεντες*, the *raising it up* in appearance, is in the graphic language of an eye-witness, and of one familiar with the phraseology of seamen,

\* See note on *αναγω* in the voyage.

† *Ενθυδρομησαμεν*, ran straight. To "*run*," in ancient as in modern language, evidently meant to sail before the wind.

who, in their own language, appear to *raise* the land in approaching it.

From the time of the arrival of St. Paul and his companions at Cæsarea, there is no notice with which we can connect the proceedings of St. Luke, till he embarked with St. Paul on his voyage to Italy. It is supposed, with much probability, that it was during this period that he wrote his Gospel.

There are certain peculiarities in the style of St. Luke, as a narrator of nautical events, which it is of the utmost importance to attend to, because a knowledge of them throws light, not only upon the voyages he has recorded in the Acts, but upon several passages in his Gospel, and even upon the sources of the Gospel itself.

The difference in the manner of describing such events by seamen and by landmen is too obvious to require remark; but there is a third class of authors, who are, properly speaking, neither seamen nor landmen — I mean men who, for some cause or other, have been much at sea, who understand what they are describing, and who, from their living and being in constant intercourse with the officers of the ship, necessarily acquire the use of the technical language of seamen. An attentive examination of St. Luke's writings shows us that it is to this class of authors that he belongs. How he acquired that correct knowledge of this subject,

and that command of its language which he uniformly displays, we have no means of knowing; but I cannot help thinking that he must, at some period of his life, have exercised his profession at sea. From the great numbers of people which we often hear of in ancient ships\*, we must suppose they carried surgeons: whether St. Luke ever served in that capacity or not is of course mere matter of conjecture. One thing is certain, no one unaccustomed to a sea life could have described the events connected with it with such accuracy as he has done.

But although his descriptions are accurate both as to manner and language, they are *unprofessional*. The seaman in charge of the ship has his attention perpetually on the stretch, watching every change or indication of change of wind and weather. He is obliged to decide upon the instant what measures must be taken to avail himself of favourable changes, or to obviate the consequences of unfavourable. Hence, in describing them, he naturally dwells upon cause and effect. He tells us not only what was done, but why it was done. The impression produced by incidents at sea upon the mind of the mere spectator is altogether different, and of course his mode of describing is equally so. He tells us what has happened, but rarely tells us either how

\* Josephus informs us that the ship in which he was wrecked in his voyage to Italy, contained six hundred souls.—*Life*, chap. iii., edit. Hud., p. 905.

or why the measures connected with it were taken. In doing so he often mentions circumstances which a seaman would not think of noticing from their familiarity, or from being matters of course, and is frequently silent as to those that are of the greatest importance, and which no seaman would pass over.

Now these are exactly the peculiarities which characterise the style of St. Luke as a voyage writer; for instance, when the ship was run ashore, he tells us that they loosed the bands of the rudders; a seaman would rather have told us, in the previous stage of the narrative, how they were secured — a matter of necessity in an ancient ship anchored by the stern; and when we remember that it was on the face of a lee shore, in a gale of wind, it must have been one of difficulty; whereas, loosing them was a mere matter of course. Thus, also, when they became aware of the proximity of land, a seaman would hardly have omitted telling what were the indications which led “the shipmen to deem that they drew near to some country” (xxvii. 27.).

It would be easy to multiply instances from the narrative, and to cite analogous ones from the published works of medical men who have written narratives of their voyages; for those who are led by the love of science or adventure to make long voyages, frequently become their historians. I prefer, however, making the comparison with a fragment of

a journal of an officer in Captain Cook's ship, from the *United Service Magazine* (May, 1842, p. 46.). There can be no doubt but that in this case the author was a medical man.\* The correspondent who communicates it infers that he is so, from the circumstance of a medical case being in the same book. The professional manner in which he describes Captain Cook's remains would have been proof sufficient to me that he was one. I prefer this as a case in point, because we have it as it was written on the spot, without being pruned or worked up for effect †, and because we can compare it with published accounts of the same events, written by professional seamen. It exhibits all the peculiarities which I have alluded to as characterising the style of St. Luke. The author relates the events, as they fell under his knowledge, in correct nautical lan-

\* I have no doubt but that the author of this interesting fragment is Mr. Anderson, surgeon of the *Resolution*, for the following reason :— He calls the other ship the *Discovery*, but does not name his own. I find the words in which he describes Captain Cook's remains in Captain King's account of the voyage, and he accompanies the two captains when they land,— circumstances which clearly point to the principal surgeon.

† In this respect this fragment presents a curious contrast with Captain King's account of recovering the remains of Captain Cook, and committing them to the deep with military honours, which he closes with the impression made by the solemnity on their feelings. By the surgeon's account, some of the bones were not Captain Cook's; but he adds, "we said nothing about it;" and some of them were brought the day after the funeral, and dropt into the sea as near as possible to the spot, where the other bones were dropt the day before.

guage, but he offers no explanations as to the causes. Take the following examples :—

“24th Feb. (1779).—In the evening hauled our wind, and stood out clear of the islands.”—*Journal*, p. 46.

Compare this with Captain King’s account :—

“At sunset, observing a shoal which appeared to stretch a considerable distance to the west of Mowee, towards the middle of the passage, and the weather being unsettled, we tacked, and stood to the south.”—*King’s Voyage*, p. 84.

“28th Feb.—Hauled our wind, and are to stand off and on for the night.”—*Journal*, p. 46.

“It being too late to run for the road on the south-west side of the island, where we had been last year, we passed the night in standing on and off.”—*King’s Voyage*, p. 88.

Here it will be observed, that the nautical language is quite as correct in the one case as in the other ; the only difference being, that the seaman relates the causes of their proceedings, whilst the medical author of the journal omits them.

When St. Luke mentions the incident of hoisting the boat on board, he informs us that it was a work of difficulty (μολις, xxvii. 16.) ; but he does not tell us wherein the difficulty consisted. In like manner, when the author of the journal notices the incident of getting the Resolution’s foremast into its place, he merely says, “The mast, after much trouble and many risks, was got in ;” but is silent as to the causes of the risks and trouble. Compare this with the accounts given by seamen of

the same circumstance, where we are not left in doubt as to the causes. Captain King says :

“Early on the morning of the 20th, we had the satisfaction of getting the foremast stepped ; it was an operation attended with great difficulty and some danger, our ropes being so exceedingly rotten, that the purchase gave way several times.”—*King's Voyage*, p. 79.

In a journal of the same voyage, by an officer of the *Discovery*, 8vo, London, 1785, it is thus recorded :—

“Early on the morning of the 20th, we had the satisfaction of getting the foremast of the *Resolution* shipped, a work of great labour and some difficulty, as the ropes were now become rotten, and unable to sustain the purchase.”

This mode of writing accounts for the omission, in the narrative of St. Luke, of circumstances which, nautically speaking, were of much importance, and the insertion of others which were quite unimportant—a style which, had it been his object to have described a sea voyage, would have been liable to serious objections ; but it was no part of his purpose to do so, farther than as his narrative illustrated passages in the life of St. Paul. And were it not that in cases where he was actually present, he is more than usually circumstantial \*,

\* “It may be laid down as a pretty general rule, that *circumstantiality*, which enhances the credibility of a witness, diminishes that of a historian, remote in time or situation.”—*Hallam's Middle Ages*, vol. ii. note to p. 168. St. Luke unites both excellencies in a remarkable degree.

we should probably have learnt no more than that the apostle was shipwrecked on his voyage to Italy. His notices of events, when he writes as a witness, are altogether accidental and fragmentary. He records them simply because he observes them, and not because they are intrinsically important. They drop unintentionally from his pen, and are never thrown in for the purpose of heightening the effect; although, no doubt, they sometimes have that effect, witness the account of the visit to Philippi; for it is scarcely possible to write circumstantially without, at the same time, writing graphically. Still less are circumstances thrown in for the purpose of lending probability to his narration. On the contrary, they often detract from it. "*Le vrai n'est pas toujours le vraisemblable.*" The most important circumstances probably did not fall under his notice; and he never stops to offer explanations. St. Luke, however, possesses two qualifications as a writer, which, in a great degree, compensate for his omissions, and which enable us to supply many of them with the greatest certainty. The first is, his perfect knowledge of his subject, and the next his accuracy. No man, who was not gifted in a supereminent degree with this quality, could have given a narrative capable of being tested as his has been in the following examination: he must not only have been an accurate observer, but his memory must have been accurate,



and his habits of thought and reasoning not less so; hence his facts afford the firmest grounds for resting conclusions upon, and these in their turn furnish data for mathematical reasoning. The reader may give an incredulous smile at the idea of working the dead reckoning of a ship from such disjointed and apparently vague notices, yet I have done so,—and the result is nearer than I could have expected beforehand, had it been the journal of a modern ship, and I had had her log-book lying before me. I admit that a coincidence so extraordinary is, to a certain extent, accidental; but it is an accident which could not have happened had there been any inaccuracy on the part of the narrator: had he made an error of a single day it would have been difficult to have reconciled his statements; and had it been any other island than Malta upon which the ship was wrecked, it would have been impossible. I refer the reader to the account of the voyage for the calculations and authorities upon which they are founded.

The care which he takes on all occasions to select the most appropriate expression, and the precision which results from it, are very remarkable: thus, to express the progression of a ship, we have not only the substantive *πλοος* (xxvii. 9.), but not less than thirteen verbs expressing the same thing, but with a distinction indicating the particular circumstances of the ship at the time; I may add, that, with the

exception of the last three, they are all nautical expressions. They are also peculiar to the writings of St. Luke, occurring both in St. Luke's Gospel and in the Acts, but not being used by any of the other New Testament writers. The following is the list : —

1. Πλεω. Luke, viii. 23. Acts, xxi. 3., xxvii. 2. 6. 24., &c.
2. Αποπλεω. Acts, xiii. 4., xiv. 26., xx. 15., xxvii. 1.
3. Βραδυπλοεω. Acts, xxvii. 7.
4. Διαπλεω. Acts, xxvii. 5.
5. Εκπλεω. Acts, xv. 39., xviii. 18., xx. 6.
6. Καταπλεω. Luke, viii. 26.
7. Ὑποπλεω. Acts, xxvii. 4, 7.
8. Ευθυδρομω. Acts, xvi. 11., xxi. 1.
9. Ὑποτρεχω. Acts, xxvii. 16.
10. Παραλεγομαι. Acts, xxvii. 8. 13.
11. Φερομαι. Acts, xxvii. 15.
12. Διαφερομαι. Acts, xxvii. 27.
13. Διαπεραω. Acts, xxi. 2.

If we attend to the occasions upon which they are used, it will be seen how perfectly appropriate they are, and how much they express in a single word. Thus we are told they passed to leeward of Cyprus, Crete, and Clauda; they *sailed under* Cyprus and Crete (*ὑπεπλευσαμεν*, xxvii. 4. 7.), and *ran under* Clauda (*ὑποδραμοντες*, xxvii. 16.). Now to "run," in ancient as in modern times, meant to sail before the wind, which they did in running down upon Clauda; but, in approaching Cyprus they were close-hauled, and in approaching Crete they had the wind abeam.

It may be asked, how we can be certain that the nautical language of St. Luke is so correct ?

The reply is, in the first place, that it must be a real language, and correctly used, which admits of being deciphered as it has been. In the account of the voyage, I have cited the case of a German physician, who made a voyage in the same seas, and in some part of it under very similar circumstances ; but although he obviously intended to give an account of his voyage, his statements are not only confused but impossible, and we have no difficulty in seeing that he does not understand what he is writing about.

Independently, however, of this consideration, it so happens, that although ancient literature is scanty in the department of voyages, yet with respect to the terminology of seamanship it is by no means so. Julius Pollux, in his *Onomasticon*, has given many pages of Greek nautical terms ; the arrangement is confused, and he sometimes mistakes the meaning of the words ; but for our present purpose explanation is not required ; it is sufficient to know that such were the terms used by the ancients. It will be seen by the notes, that a large portion of those employed by St. Luke are to be found in this author.

I have stated in the Introduction, that in comparing his nautical style with that of the two other evangelists who describe the miracle of stilling the tempest in the lake of Tiberias, I was led to

the consideration of the connection which subsists between these three writers, and into an inquiry concerning the original authorities employed by him in composing his Gospel; but as my immediate object is to elucidate his narrative of the voyage, I have thrown my remarks on these subjects into a separate dissertation.





# CHART OF ST PAUL



# VOYAGE AND SHIPWRECK

OF

## SAINT PAUL.

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### CHAPTER I.

CÆSAREA TO MYRA.

(Acts, xxvii. 1—6.)

AFTER two years' imprisonment at Cæsarea, and after repeated examinations before Felix and Festus, successive Roman governors of Judæa, and before King Agrippa, the last of the Herod family, St. Paul appealed unto Cæsar.

In consequence of this appeal it was determined that he should be sent, along with other prisoners,

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1 Ὡς δε εκριθη του αποπλειν\*  
ἡμας εις την Ιταλιαν, παρεδι-  
δουν τον τε Παυλον και τινας  
ἑτερους δεσμωτας ἑκατονταρχη,  
ονοματι Ιουλιφ, σπειρης Σεβα-  
στης.

1 And when it was deter-  
mined that we should sail into  
Italy, they delivered Paul and  
certain other prisoners unto  
one named Julius, a centurion  
of Augustus' band.

---

\* αποπλειν. Literally "to sail from." St. Luke, by his accurate use of nautical terms, gives great precision to his



by sea to Italy. He was accordingly committed to the charge of a centurion named Julius, of the Imperial band, a person, who, upon all occasions, treated the apostle with humanity and consideration.

Cæsarea was at this time the principal seaport of Syria.\* It would appear, however, that there were no ships in the harbour capable of accommodating the party of Julius, including the prisoners and their guard. He therefore embarked them in a ship of Adramyttium†, a seaport of Mysia, on the eastern shore of the Ægean Sea, opposite Lesbos. This ship was evidently bound for her own port, and her course from Cæsarea thither necessarily led her close past the principal seaports of Asia.‡ Now

language, and expresses by a single word what would otherwise require several. Mitford observes, that “we are often at a loss to render the verb *Πλεω* otherwise than by our word *to sail*, though they are far from being of the same precise import. The use of oars, so prevalent in Grecian navigation, is so little known in our seas, that to sail is our only general term for going by sea.”—*Hist.* ii. 362. St. Luke alone of the sacred writers uses this nautical term, either simply, or, as in the present instance, in composition.

\* See account of Cæsarea in Josephus, *Antiq.* xv. 13. Bryant, absurdly enough, supposes that Ptolemais (Acre) was the port of embarkation; and adds, as if it were a mere conjecture, “Gro-tius is of opinion that they went from Cæsarea:” it would have been quite contrary to St. Luke’s usual method to have omitted the land journey from Cæsarea to Ptolemais, had it actually taken place. See Acts, xxi. 7, 8.

† See a very full account of the notices in ancient authors of this place, in Wetstein *ad loc.*

‡ By Asia St. Luke means pro-consular Asia, of which

this is also the course which a ship would take in making a voyage from Syria to Italy; they would, therefore, be so far on their voyage when they reached the coast of Asia, and in the great commercial marts on that coast, they could not fail to

2 *Επιβαντες δε πλοιῳ Ἀδραμυττηνῷ μελλοντι πλεῖν εἰς τοὺς\* κατὰ τὴν Ἀσίαν τοποὺς, ἀνηχθήμεν, ὅντος συν ἡμῖν Ἀρισταρχοῦ Μακεδόνης Θεσσαλονικέως.*

2 And entering into a ship of Adramyttium, we launched, meaning to sail by the coasts of Asia; *one* Aristarchus, a Macedonian of Thessalonica, being with us.

Ephesus was the capital, i. e., the western part of Asia Minor, which, according to Cicero, comprehended Caria, and Lycia; and according to St. Luke, did not include Pamphylia. Acts, ii. 9, 10. By attending to this, we are left in no doubt as to "the places" (*τοὺς τοποὺς*) meant in the text, which they would arrive at by the route they pursued. The places "*κατὰ τὴν Ἀσίαν*," which may be translated "along the coast of Asia," were then flourishing sea-ports, three of which are mentioned by St. Luke; namely, Myra (Acts, xxvii. 5.), Patara (xxi. 1.), and Cnidus (xxvii. 7.) For an account of the present state of Myra, see Spratt and Forbes, *Travels in Lycia*, i. 125. It has been observed that the magnitude of ancient cities might be inferred from that of their theatres; the diameter of that of Myra is 360 feet, and the "arena is now a corn-field;" *Ib.* 132. The theatre of Patara is also a magnificent structure; see a view of it in the *Ionian Antiquities*, published by the Dilettante Society (vol. ii. pl. 56, 57.), and an account of it in Beaufort's *Caramania*, p. 5.; for an account of Cnidus, see Clarke's *Travels*, vol. ii. p. 216.

\* *μελλοντι πλεῖν εἰς τοὺς*, &c., is the reading both of the Vatican and Alexandrian MSS., the two earliest, and, in a case like the present, best authorities, the common reading is *μελλοντες πλεῖν τοὺς*, &c.; the preposition *εἰς* renders the meaning obvious.

find opportunities for carrying them on to their ulterior destination. On St. Paul's former voyage from Philippi to Syria (Acts, xx. 6. to xxi. 7.) the same plan was adopted: they sailed to the places on the coast of Asia (*κατα την Ασίαν*), and changed ship at one of them, Patara, just as we find they did in the present instance at Myra. We have, therefore, an obvious reason why they took their passage in this ship. The apostle was on this occasion accompanied by Aristarchus, the Macedonian of Thessalonica, and St. Luke, the historian of the voyage. The former appears to have been a prisoner, for St. Paul, in his epistle to the Colossians, designates him as his fellow-prisoner.\* iv. 10.

On the day after they left Cæsarea they touched at Sidon; from the distance accomplished, sixty-seven geographical miles, we must infer that they had a fair, or at least a leading wind, probably westerly, which is the wind which prevails in this part of the Mediterranean.† We are not informed

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3 Τῇ δὲ ἑτέρᾳ κατηχθήμεν εἰς  
Σιδῶνα.

3 And the next *day* we  
touched at Sidon.

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\* This companion of St. Paul is very unceremoniously mentioned by our English translators, by the gratuitous insertion of the word "*one*." He is twice previously noticed in the Acts, once as a Macedonian (xix. 29.), and once as a Thessalonian (xx. 4.); here he is mentioned as both.

† "The wind continues to the westward. I am sorry to find it almost as prevailing as the trade winds." (4th July, 1798, near Alexandria.) — *Life of Lord de Saumarez*, i. 210. "We have

of the cause of their stopping at Sidon; probably, however, it was for the purposes of trade.\* Whatever was the cause of the delay, it afforded the centurion an opportunity of showing kindness to St. Paul, for we are told in the narrative that he “gave him liberty to go unto his friends to refresh himself.”

Loosing† from thence they were forced, by con-

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<p>3 Φιλανθρωπως τε ὁ Ιουλιος          τῷ Παύλῳ χρησαμενος, ἐπέτρεψε          πρὸς τοὺς φίλους πορευθεντα,          ἐπιμελειας τυχειν.</p>	<p>3 And Julius courteously en-          treated Paul, and gave him li-          berty to go unto his friends to          refresh himself.</p>
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just gained sight of Cyprus, nearly the track we followed six weeks ago, so invariably do the westerly winds prevail at this season.” (19th Aug. 1798.)—Ib. i. 243. A westerly wind would be fair between Cæsarea and Sidon, as the bearing of the coast line between the two places is about N.N.E. See Sailing Directions for the Coast of Syria, by Capt. E. Smith, R. N.

\* According to Strabo, Sidon was situated on the finest harbour of the continent, and contested with Tyre the supremacy of the Phœnician cities (lib. xvi. c. 2.). Achilles Tatius calls it the metropolis of the Phœnicians, *μητηρ Φοινικῶν ἡ πόλις*; he describes it as having two harbours, one of which is large with a narrow entrance, where merchant ships can winter in safety (lib. i.). To judge from its present state, the shelter was afforded by a ridge of rocks, parallel to the coast, forming a natural breakwater. The harbour was filled up during the wars of the middle ages. For an account of its present state, see Robinson's Biblical Researches, and Wilson's Lands of the Bible. The latter author gives a plan of the harbour. See a view of it in Carne's Syria and the Holy Land illustrated, vol. iii. p. 6.

† *αναχθεντες* is one of those nautical terms about which there is no doubt as to the meaning—which is, to depart from a place; it is used by St. Luke both in the Gospel and Acts, and is rendered in the authofised version, “to launch,” “to loose,”

trary winds, to run under the lee of Cyprus.\* A question here arises, which was the lee side of Cyprus? In passing it did they leave it upon their right or upon their left? Commentators are divided on the subject, but it is generally supposed that

4 Κᾶκειθεν ἀναχθεντες ὑπε-  
πλευσαμεν τὴν Κυπρον δια το  
του ὡς ἀνεμους εἶναι ἐναντιους.

4 And when we had launch-  
ed from thence, we sailed un-  
der Cyprus, because the winds  
were contrary.

“to sail,” “to set forth,” “to depart.” *Ἀναγεσθαι* is amongst the nautical terms of Julius Pollus: there is no precisely corresponding term in English. Mitford observes, that in rendering it “we must risk the sea phrase *to get under way*, or content ourselves with the inaccurate expression *to set sail*.”—*Hist. of Greece*, vol. ii., p. 232, note.

St. Luke uses the words *ἀποπλεω*, *ἐκπλεω*, and *ἄρω*, to express the same thing. The last is an elliptical expression: it occurs in verse 13 of this chapter, and is translated “loosing.” It would have been more accurately rendered “weighed,” *τὰς ἀγκυρας*, the anchors, being understood. Thus, in Plutarch, Pompey, p. 1208., *ἀφάμενοι τὰς ἀγκυρας*. It is, however, generally used absolutely, as in the present case, and in its English equivalent to weigh. See Wetstein ad loc. The corresponding word for coming to land is *καταγεσθαι*, Jul. Pollux, Onom. i. 102., occurs in the preceding verse.

\* *ὑπεπλευσαμεν*, “we sailed under the lee.” Dr. Falconer, in his Dissertation on St. Paul’s Voyage, supposed it meant to sail to the south of a place, because the maps of the ancients, like those of the moderns, were constructed with the north point uppermost. The explanation of Wetstein is, however, unquestionably the true one; “ubi navis vento contrario cogitur a recto cursu decedere, ita ut tunc insula sit interposita inter ventum et navem, dicitur ferri *infra* insulam.” We meet with the same word again in the 7th verse, where ample proof will be given that this is the meaning of the term. Kuinöel erroneously supposes that it means to sail close to the shore; “sublegere, oram *cominus* legere.”

they left it on their right, that is, that they passed to the south of that island. This opinion is evidently founded upon the erroneous suppositions that the coast of Syria is comprehended by St. Luke in the term *Asia*, and that the ancients only made coasting voyages. The question is not one of importance, farther than that it is desirable to leave nothing uncertain where certainty can be attained, and because, in the next place, if we are sure of the meaning of the author, in this case we can compare the proceedings of the ancient navigators with those of modern ones, who have been placed under similar circumstances in the same locality, and can thus form a more correct estimate of their seamanship.

As I dissent from the generally received opinion that they sailed by the south of Crete, I shall, in the first place, state the arguments upon which that opinion is founded. Dr. Falconer, in his Dissertation on St. Paul's Voyage, says, —

“On their loosing from Sidon, they found that their intention of continuing their voyage along the coast of Asia Minor would be frustrated by contrary winds, which obliged them to pursue their voyage under or on the southern side of the island of Cyprus, instead of the northern, as according to their plan of sailing along the coast they had at first proposed.”

Dr. Bennet, a late commentator on the Acts, expresses himself thus : —

“Sailed under or to the south of Cyprus, on account of the winds being contrary, when they would otherwise have taken them to the north, along the Asiatic coasts.”—*Lectures*, p. 399.

Dr. Bloomfield, whilst he correctly renders ὑποπλεῖν, “to sail under the lee of any high land,” and admits that, had the weather been fair, it is probable they would have taken a course to the south of Cyprus, but at a distance from it, but adds, —

“Since, however, we are told that the winds were contrary (though varying, yet all more or less adverse), they changed that course, and ὑπεπλευσαμεν τὴν Κ. Now, for the winds to have been contrary, they must have been N., or N.E., or N. N. E., or such like, and then the best way to evade their force would be to sail close under the coast of Cyprus, after having cut across to the promontory of Pedalium, so as to reach the Bay of Catium. That they coasted along Palestine, and then made for the *eastern* promontory of Cyprus (as the best commentators think), is improbable, because they would thus be brought more into the wind’s eye (as the sailors say), and into tempestuous seas.”—Note ad loc.

When we hear of contrary winds, and wish to ascertain their direction, the chief points to be determined are the ship’s actual position and intended course. Now, when St. Luke talks of contrary winds, we know that the ship had left Sidon, and must have been in sight of Cyprus, for he tells us the winds forced them to leeward of that island. Their ultimate object was Italy, and their proximate one was one or other of the “places in Asia,” which I have already shown lay in the same direction. As St. Luke does not include Pamphylia in Asia, the nearest part of that region to Syria is Lycia, and a ship’s course from Sidon thither is W. N. W., leaving Cyprus on the right. St. Luke was

perfectly aware of this, for upon the former voyage, in which he accompanied St. Paul, he tells us that on their passage from Patara, one of the "places in Asia," to Phenicia, they left Cyprus on the left hand," *i.e.* on the north. (Acts, xxi. 3.) The winds, therefore, which prevented them from taking the straight course to the places in Asia must have been from the westward. Now these are the very winds which might have been expected in this part of the Mediterranean at this season (summer). Admiral de Saumarez writes, 19th August, 1798,—

"We have just gained sight of Cyprus, so invariably do the westerly winds prevail at this season."—*Life*, i. 243.

Under these circumstances, sailing under Cyprus is equivalent to saying that they left Cyprus on their left hand; but this point is put out of doubt by St. Luke himself, for he tells us in the 5th verse that they *sailed through* the sea of Cilicia, (*διαπλευσαντες*), not *over*, as in the authorised version; but as this sea lies altogether to the north of Cyprus, they could not have sailed through it without leaving the island on their left.

In pursuing this route they acted precisely as the most accomplished seaman in the present day would have done under similar circumstances; by

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5 Το, τε πελαγος το κατα την Κιλικιαν και Παμφυλιαν διαπλευσαντες, κατηλθομεν εις Myra της Λυκιας.

5 And when we had sailed over the sea of Cilicia and Pamphylia, we came to Myra, a city of Lycia.



standing to the north till they reached the coast of Cilicia, they might expect when they did so to be favoured by the land breeze, which prevails there during the summer months, as well as by the current, which constantly runs to the westward, along the south coast of Asia Minor.\*

In April, 1844, the *Belvidera* frigate, commanded by the Honourable George Grey, sailed from Beyrout for Athens; her course, therefore, till she reached the Archipelago, was nearly the same as that of the ship of *Adramyttium*; but instead of taking the direct course, they "sailed under (*i. e.* to the east of) Cyprus, because the winds were contrary." Captain Grey informed me that he did so because he expected, by standing to the north, "to get the wind off the land:" in this he was disappointed, probably because it was too early in the season. But M. de Pagés, a French navigator, who made a voyage from Syria to Marseilles, took the same course, and has given the reasons why he did so. He informs us, that after making Cyprus,

"The winds from the west, and consequently contrary, which prevail in these places during the summer, forced us to run to the north. We made for the coast of Caramania (Cilicia) in order to meet the northerly winds, and which we found ac-

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\* "From Syria to the Archipelago, there is a constant current to the westward."—*Beaufort's Description of the South Coast of Asia Minor*, p. 39. Dr. Pococke found this current running so strong between Rhodes and the continent, that it broke into the cabin windows even in calm weather.—*Description of the East*, ii. p. 236.

cordingly. I remark here that I constantly had westerly winds from Surat, and that these winds blow generally during the summer, from the line as far as Candia (Crete). I say generally, because we must except the time of the land breezes." \*

Fynes Moryson, in his Itinerary, narrates a sea voyage from Syria to Crete, in which the circumstances of wind and weather bear a still more marked resemblance to those experienced by the ancient mariners than any of the above. He sailed from Scanderoon, the port of Aleppo, with the intention of disembarking at the city of Candia, on the north side of Crete, and therefore his course so far was the same as that of St. Paul and his companions. At first he tells us, —

"We sayled prosperously, but after the winds grew so contrary as we were driven to the south of Candia."—p. 251.

Here, in the seas where I infer from the silence of St. Luke that the circumstances of St. Paul's voyage were favourable, they "sayled prosperously;" and in the seas where St. Paul's ship met with contrary winds, μη προσεωντος ἡμας του

\* "Nous fîmes route sur l'isle de Chypre. Après l'avoir cotoyée, les vents de l'ouest, par conséquent contraires, qui règnent pendant l'été dans ces parties, nous firent élever au nord, nous cherchions la côte de la Caramanie, pour rencontrer les vents du nord, que nous y trouvâmes en effet. Je remarquerai ici que j'avois toujours eu des vents de l'ouest depuis Surate, et que ces vents soufflent généralement pendant l'été depuis la ligne jusques en Candie. Je dis généralement parceque il faut en excepter le temps de brises de terre." — *Voyages autour du Monde*, tom. i. p. 406.

*ανέμου*, "the winds grew contrary," and had precisely the same effect upon the ship, which it drove to the south of Crete; and, what is still more remarkable, Moryson is carried to Fair Havens. It is not, perhaps, easy to recognize in "the wild rocks called Calis Miniones" the Fair Bays which give the harbour its name, and which it still retains in Calos Limeones. There is no doubt, however, of the identity of the places, for Moryson marks the position of Calis Miniones by saying it is

"Some three miles distant from a monastery called Santa Maria Aggidietra,"

just as St. Luke marks it, "as nigh unto the city Lasea." The situation of the ancient city is unknown, but the monastery still remains: in Pashley's map it is spelt Hodhetria, and is exactly three miles above the "rocky promontory" which separates the two bays upon which Moryson was landed. (See view.)

Favoured, as they probably were, by the land breeze and currents, they arrive without any recorded incident at Myra of Lycia, then a flourishing seaport, now a desolate waste. The stupendous magnitude of its theatre attests the extent of its former population; the splendour of its tombs\*,

\* "Sepulchres, which for the elegance of their design, costliness of execution, and size, seem to have been suited rather for the keeping of the ashes of rulers and kings, than of common citizens."—*Spratt and Forbes*, i. p. 132.

its wealth. But it is not my intention to describe the ancient or modern state of the places visited, farther than to illustrate the events of the voyage.

This city is situated, according to Capt. Beaufort, about three miles from the sea ; according to Strabo, the distance is twenty stadia, or about two geographical miles, the difference being probably caused by the silting up of the river Andriaki, which flows past it into a spacious bay. This river, which Apian calls the port of the Myrians (*Μυρσιων επιρσιω*), Bell. Civ. lib. iv. cap. 82., was navigable to Myra, for he informs us that Lentulus, having broken the chain of the harbour, ascended to that city.

The voyage has hitherto been prosperous, and the object which the party had in view in proceeding to "the places in Asia" is attained. At the first of them which lay in their way, the centurion found a ship of Alexandria, loaded, as we afterwards learn, with wheat, bound for Italy, in which he embarked his charge. Egypt was at this time one of the granaries of Rome, and the corn which was sent from thence to Italy was conveyed in ships of very great size.\* From the dimensions

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6 Κάκει εύρων ό έκατονταρχος  
πλοιον Αλεξανδρινον πλεον εις  
την Ιταλιαν, ενεβιβασεν ήμας  
εις αυτο.

6 And there the centurion  
found a ship of Alexandria  
sailing into Italy ; and he put  
us therein.

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\* After the capture of Jerusalem the Emperor Titus returned to Italy in one of these ships, touching at Rhegium, and landing at Puteoli. Sueton. Vit. ch. 5. ; see also Vit. Augusti, 98. ; and Seneca, Epist. 77.

given of one of them by Lucian\*, they appear to have been quite as large as the largest class of merchant-ships of modern times. We need not be surprised, therefore, at the number of souls which we afterwards find were embarked in this one†, or that another ship of the same class could after the shipwreck convey them to Italy, in addition to her own crew.

Some commentators have supposed that Myra lay so much out of the track from Alexandria to Italy that the term Alexandrian must mean the particular "build" of the ship, just as we say Liburnian galleys, and not as marking the port to which she belonged. Now it is quite true that Myra is out of the direct course from Alexandria to Italy, which is by the south of Crete. But with the westerly winds which prevail in those seas, ships, particularly those of the ancients, unprovided with a compass, and ill calculated to work to windward, would naturally stand to the north till they made the land of Asia Minor, which is peculiarly favourable for such a mode of navigation, because the coast is bold and safe, and the elevation of the mountains makes it visible at a great distance; it abounds in harbours, whilst the sinuosities of its

\* In the Dialogue Πλοιον η Ευχη, see the dissertation on ancient ships, post.

† Granville Penn, on the authority of the Vatican MS., reads "seventy-six," instead of "two hundred and seventy-six." See his note on the subject; the Alexandrian MS., however, has two hundred and seventy-six.

shores and the westerly current would enable them, if the wind was at all off the land, to work to windward, at least as far as Cnidus, where these advantages ceased.\* Myra lies due north from Alexandria†, and its bay is well calculated to shelter a wind-bound ship. The Alexandrian ship was not, therefore, out of her course at Myra, even if she had no call to touch there for the purposes of commerce.

We may suppose that the same westerly winds which forced the Adramyttian ship to the east of Cyprus, drove the Alexandrian ship to Myra. The land breeze on the Cilician coast appears to be quite local, and, therefore, might enable St. Paul's ship to reach Myra, although the prevalent wind did not admit of the ships in that harbour proceeding on their voyage.

\* We learn from Thucydides (viii. 35.), that Cnidus was frequented by ships from Egypt, *απ' Αιγυπτου ὀλκαδες*.

† According to Ptolemy it lies just east of the meridian of Alexandria, which is precisely its position. I have never had occasion to consult this great geographer without being astonished at the extent and accuracy of his information. It is easy for modern writers to find fault with him; the very precision he introduced into the science enables them to detect errors unavoidable in the state of knowledge which the ancients had of distant regions, or caused by errors in transcription. The edition of Tauchnitz, which I have used, though unpretending in form, is, I believe, the most correct.

## CHAP. II.

## VOYAGE FROM MYRA TO FAIR HAVENS IN CRETE.

(Acts, xxvii. 7, 8.)

IN this ship of Alexandria, in which the centurion and his party embarked, they proceeded on their voyage. Their progress, after leaving Myra, was extremely slow; for we are told that it was many days before they were “come over against Cnidus,” that is, before they reached the entrance of the Ægean Sea. As the distance between the two places is not more than 130 geographical miles, which they could easily have accomplished with a fair wind in one day, they must either have met with calms or contrary winds. I infer that the delay was caused by unfavourable winds, from the expression *μολις*, which is translated in our authorised version “scarce,” producing the impression that the ship had scarcely reached Cnidus when the winds became contrary; but which ought to be rendered “with difficulty,” expressing the difficulty which ships experience in contending with

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7 *Εν ικαναῖς δὲ ἡμέραις  
βραδυπλοῦντες, καὶ μολὶς γενο-  
μενοὶ κατὰ τὴν Κνίδον, μὴ  
προσεωντος ἡμᾶς τοῦ ἀνέμου,  
ὑπεπλευσάμεν τὴν Κρήτην κατὰ  
Σαλμῶνην.*

7 And when we had sailed slowly, many days, and scarce were come over against Cnidus, the wind not suffering, we sailed under Crete, over against Salmone.

adverse winds. The same word occurs in the following verse, where it is translated "hardly," where there can be no doubt as to its meaning, for the general trending of the south coast of Crete, which they were navigating (*παραλεγομενοι*, v. 8.), was the same as that of Asia, east and west; but we are now told that the winds were contrary. (v. 7.) Cicero, in one of his epistles, uses very similar terms to express the effects of contrary winds:—

"*Adversis ventis usi essemus, tardeque et incommode navigassemus.*"\*

"We met with contrary winds, and *sailed slowly and with difficulty.*"

I am satisfied, therefore, that the words in the original, *βραδυπλοουντες, και μολις γενομενοι*, "sailing slowly and with difficulty were come," &c., express the delays which a ship experiences in working to windward.

The question now occurs, what was the direction of the wind which produced the effects recorded in the narrative. We are told, that when they "were come over against Cnidus, the wind not suffering us, we sailed under Crete, over against Salmone." (v. 7.) The course of a ship on her voyage from Myra to Italy, after she has reached Cnidus, is by the north side of Crete, through the Archipelago, W. by S. Hence a ship which can make good a course of less than seven points from the wind, which I have shown elsewhere† can-

\* Epist. ad Familiares, Lib. xiv. Epist. v.

† Dissertation on ancient ships.



not be far from the truth, would not have been prevented from proceeding on her course, unless the wind had been to the west of N. N. W. But we are told that she ran "under Crete, over against Salmone," which implies that she was able to fetch that cape, which bears about S. W. by S. from Cnidus; but unless the wind had been to the north of W. N. W., she could not have done so. The middle point between N. N. W. and W. N. W. is north-west, which cannot be more than two points, and is probably not more than one, from the true direction. The wind, therefore, would in common language have been termed north-west. Now, this is precisely the wind which might have been expected in those seas towards the end of summer. We learn from the sailing directions for the Mediterranean, that, throughout the whole of that sea, "but mostly in the eastern half, including the Adriatic and Archipelago, the north-west winds prevail in the summer months, \* \* \* the summer Etesiaë come from the N. W." (p. 197), which agrees with Aristotle's account of these winds.\* According to Pliny, they begin in August, and blow for forty days.†

With north-west winds the ship could work up from Myra to Cnidus; because, until she reached

\* Οἱ Ερησῖαι λεγόμενοι μῆξιν ἔχοντες τῶν τε ἀπὸ τῆς ἀρκτοῦ φερομένων καὶ ζεφυρῶν. — *Arist. de Mundo*, cap. iv.

† *Perflant diebus quadraginta quos Etesias vocant.* — *Plin.* lib. ii. cap. 4.

that point she had the advantage of a weather shore, under the lee of which she would have smooth water, and, as formerly mentioned, a westerly current; but it would be slowly and with difficulty. At Cnidus that advantage ceased; and unless she had put into that harbour, and waited for a fair wind, her only course was to run under the lee of Crete, *κατα Σαλμωνην*, in the direction of Salmone\*, which is the eastern extremity of that island. After passing this point, the difficulty they experienced in navigating to the westward along the coasts of Asia, would recur; but as the south side of Crete is also a weather shore, with north-west winds, they would be able to work up as far as Cape Matala. Here the land trends suddenly to the north and the advantages of a weather shore cease, and their only resource was to make for a harbour. Now, Fair Havens is the harbour nearest to Cape Matala, the farthest point to which an ancient ship could have attained with north-westerly winds.

The delays experienced by navigators proceeding westward in this part of the Mediterranean during the summer months, are of such constant occurrence that I have scarcely found an instance in which they have not been encountered.

Rauwolf, a German physician, who travelled in

\* This promontory still retains its ancient name. — See *Strabo*, lib. ii. cap. 14. *Apol. Rhod.* lib. iv. ver. 1693. *Ptol.* lib. iii. cap. 17.

the Holy Land in the 16th century\*, passed and repassed by the same track which St. Paul did. On his voyage eastward, the winds were favourable. The ship touched at and watered at a port which he calls Calismene (p. 16.), which is evidently Fair Havens. After passing Cape Salmone, they met with a ship coming from the eastward, which had been seven weeks on her passage from Tripoli, which they were obliged to supply with biscuit. Upon their return, they met with the same contrary winds which that ship had encountered when off the coasts of Lycia and Pamphylia. At length, when they had reached the small mountainous island of Scarpanto, he tells us that a *north* wind sprung up, which, he says, drove them *on their right course* towards Salmone. †

It is interesting to compare the confused and blundering account of the physician of Augsburg with the few, but accurate notices, of the physician of Antioch. In the first place, had the wind been northerly, no ship bound for the westward would have run down from Scarpanto to the south side of Crete; and in the next place, this was not "the right course," which was W. by S. across the Ægean Sea, to the north of Crete. Now, a northerly wind would have been quite favourable for such a course. Rauwolf's ship could, as we learn, lie

\* Leonharti Rauwolfen Raiss in die Morgenlander, Augsburg, 1582. It is translated by Ray and included in his Collection of Travels, vol. ii.

† P. 465.

within about six points of the wind\*; hence a northerly wind would have been quite fair. St. Luke, in a ship in the same position between Carpathus (Scarpanto) and Cnidus, and meeting with the same winds, says, shortly, but correctly, that the winds did not permit of their proceeding on their course, and that they ran to leeward of Crete. (v. 7.)

It appears to me, that in the ancient ship they had, not only a more accurate historian, but more skilful seamen. St. Luke tells us that they succeeded in reaching Fair Havens, although it was with difficulty. Rauwolf says, that, although they got into smooth water under the lee of Crete, in their apprehensions of being driven towards Africa, they kept so close to the high land, that they had much difficulty in avoiding being shipwrecked on Candia †; a proceeding which argues any thing but good seamanship.‡ They saved their ship, but failed in their

\* He tells us that, as they were proceeding eastwards, there were only three out of eight winds that were contrary, Sirocco, Levante, and Gregale (p. 18.); hence the ship could lie within six points of the wind.

† “Also wurden wir des Getöses und Rauschen der Winden und Wellen wol loss: dargegen cam unser Schiff den Gestadten Candia so nahe, das wir alle Augenblicke müsten eines Schiffbruchs gewartig sein.” — P. 465.

‡ Should this meet the eyes of my gallant friends Captains the Hon. G. Grey and J. Lunn, R.N., it may recal to them the result of a similar blunder, on the part of a *foreign* sloop of war, in the Bay of Gibraltar. I was standing beside the former when our attention was attracted by this vessel passing close by the New Mole, with her top-gallant sails set, staggering

attempt to reach a harbour, which could be no other than Fair Havens, and were obliged to put back to the Calderon Islands.

Sir James afterwards Lord de Saumarez, returning from Aboukir after the battle of the Nile, with a detachment of Lord Nelson's fleet, stood to the north till he discovered the island of Cyprus, from whence he intended to pass by the north side of Candia (Crete); but the winds proved contrary, and he was forced, like the ancient voyagers and Rauwolf \*, to run to the south of that island. His delightful journal, addressed to Lady Saumarez, and written from day to day, throws much light upon the circumstances which affect the navigation of this part of the Mediterranean, and shows how perfectly they agree with those experienced by St. Paul and his companions.

under a stiff Levanter. Captain Grey immediately exclaimed, "That gentleman will find himself in a scrape; I must run down and make Lunn get up his steam." The event very soon justified Captain Grey's precaution: before she reached the Ragged Staff, an eddy squall took her aback; in a moment sheets and halyards were gone, and the anchor dropt; the next squall struck her in the opposite direction; the anchor did not hold, and but for the assistance of Captain Lunn in the Locust steamer, she would probably have drifted on the rocks of Algesiras. The moral of the story I give for the benefit of my nautical readers. In standing into the Bay of Gibraltar when it blows hard from the East, give the Rock a wide berth; and if you have occasion to slip your cable, bend the buoy rope *outside* of the hawse-hole!

\* P. 465.

On the 28th of August, 1798, he writes :—

“ We are still off the island of Rhodes, which appears fertile and well cultivated. We have also sight of Candia, at the distance of above thirty leagues ; our present route is different from any of the former, as we go to the northward of Candia amidst the innumerable islands that form the Archipelago.” \*

This was precisely the course which St. Paul's ship was pursuing. The contrary winds, however, forced him, as they had forced the ancient navigators, to run to the south of Crete. On the first of September, 1798, he thus writes to Lord Nelson :—

“ After contending three days against the adverse winds which are almost invariably encountered here, and getting sufficiently to the northward to have weathered the small islands that lie more immediately between the Archipelago and Candia, the wind set in so strong from the westward that I was compelled to desist from that passage, and was compelled to bear up between Scarpanto and Guxo (Carpathus and Casus).” †

It is to be observed, that the fleet could not “ fetch” Salmone with the wind at west ; which shows that in the apostle's case the wind must have been to the north of west.

I have already adduced the case of Fynes Morryson, whose ship was also forced to deviate from the original intention of going to the north of Crete.

After these instances, it will scarcely be thought necessary to have recourse to an ancient scholiast for the reasons which induced the navigators of St. Paul's ship to pass by the south of Cape Salmone ;

\* Life, p. 248.

† Ib. p. 253.

yet recent commentators assure us that "this question is resolved by the account of Eustathius, who on another occasion mentions that there were no good ports on the northern side of that island (Crete) — Δυσλιμενος ἡ Κρητη προς την βορρῶν."\* In fact, it so happens that there are excellent harbours on the north side of Crete namely, Souda and Spina Longa.

After working up along the southern coast of Crete, they reached Fair Havens, which we have seen is the farthest point which an ancient ship, navigating under the lee of Crete, could reach with north-west winds. As this is an important point in the voyage, it becomes necessary to ascertain precisely its situation, as well as that of the port of Phenice and the island of Clauda. St. Luke marks the position of Fair Havens by its vicinity to the city of Lasæa; but neither Fair Havens nor Lasæa are noticed by any other ancient author†, nor have

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8 Μολις τε παραλεγόμενοι  
αυτην, ηλθομεν εις τοπον τινα  
καλουμενον Καλους Λιμενας, ὃ  
ἐγγυς ην πολις Λασαια.

8 And, hardly passing it,  
came unto a place which is  
called the Fair Havens; nigh  
whereunto was the city of  
Lasea.

---

\* Valpy's edit. of N. Test. *ad loc.* quoted from Dr. Falconer. Even Barthelemy, in his *Anacharsis*, is misled by Eustathius, and assures us there are no harbours on the north side of Crete.

† Pliny enumerates forty out of the hundred cities of Crete, amongst which is Lasos, which Dr. Bloomfield conjectures to

the ruins of the city been discovered in modern times. Commentators have generally supposed that *Καλούς Λιμένας*, or Fair Havens, of St. Luke, is the same as *Καλή Ακτή*, or Fair Strand\*, of Stephanus Byzantinus.† This, however, is said to be a city of Crete; but St. Luke, by mentioning Fair Havens as in the vicinity of a city, seems to show that there was no city there. Mr. Pashley found a district in Crete bearing the name of *Akté*, and supposes, with probability, that the city mentioned by Stephanus was situated there. This district is, however, at the west end of Crete, and cannot be the same as Fair Havens, which is on the south coast.

Mr. Pashley afterwards visited the place, which still bears the ancient name, and which I am prepared to show, is identical with the Fair Havens of St. Luke; but, unfortunately, the work terminates without any account of his observations. I am, however, indebted to Signor Antonio Schranz,

be the same city as that mentioned by St. Luke, namely, “the Lasian city.” Admitting it to be so, it will not avail us in our present inquiry, for Pliny does not indicate its position.

\* *Ακτή ὁ Αἰγιαλός, καὶ ὁ παραθαλασσιος τόπος*, “the beach, and place along the sea.”—Hesych. Notwithstanding the authority of Hesychius, which however is not great in such matters, I suspect that *ακτή* and *αιγιαλός* are not synonymous; that the latter means a sandy beach (see note on v. 39.); the former, a more general term, equivalent to the English strand. Julius Pollux distinguishes the *χωρία ἐπιθαλαττιδία* into *ακτή, ἡων, αιγιαλός, χηλή, ὑφορμός, ὄρμος, λιμὴν*.—Lib. i. 99.

† *Καλή Ακτὴ πόλις Κρητῶν, &c.*



the able artist who accompanied him, for the view of this interesting locality taken upon the spot.

Dr. Pococke appears to have been the first who ascertained its exact situation ; he says —

“In searching after Lebena farther to the west, I found out a place which I thought to be of greater consequence, because mentioned in Holy Scripture, and also honoured by the presence of St. Paul, that is, the Fair Havens, near unto the city of Lasea ; for there is another small bay, about two leagues to the east of Matala, which is now called by the Greeks Good or Fair Havens (Λιμενες Καλους).”\*

Dr. Pococke found no ruins here, nor is there reason to suppose that it ever was more than it is at present—an open roadstead, or rather two roadsteads contiguous to each other.

Its retention of its name is owing, no doubt, to its appropriateness. In the old sailing directions, *Licht der Seevaert* (Amst. 1621), and *Miroir de la Mer*, it is thus described : —

“Right to the east of Cabra (an islet) lies a fair bay (een schoone bay, Dutch ; une belle baie, Fr.), where there is good anchorage ; there is, also, one immediately to the west of it, where there is also good anchorage.”†

\* Travels in the East, vol. ii. p. 250.

† Recht beeosten Cabra leygt een schoone bay daer seer goedt rede is, desheligier ook een der recht bewesten daer't saer goedte legghen is. — *Licht der Seevaert*, p. 217.

Il y a, droit à l'est de Cabra, une belle baie, où il y a une fort bonne rade, comme aussi encore une autre droit à l'ouest de là, où il fait aussi bon d'ancrer. — *Miroir de la Mer*, p. 80.







Engraved by J. G. Thompson

From the original drawing by J. G. Thompson

Published by J. G. Thompson



The most conclusive evidence, however, that this is the Fair Havens of Scripture is, that its position is precisely that where a ship, circumstanced as St. Paul's was, must have put in. I have already shown that the wind must have been about N.W., but with such a wind she could not pass Cape Matala; we must, therefore, look near, but to the eastward of this promontory, for an anchorage well-calculated to shelter a vessel in north-west winds, but not from all winds, otherwise it would not have been in the opinion of seamen an unsafe winter harbour. Now, here we have a harbour which not only fulfils every one of the conditions, but still retains the name given to it by St. Luke.

Here, we learn, they were detained till "navigation had become dangerous,"\* in consequence of the advanced state of the season. The fast, supposed of the expiation, which took place about the period of the autumnal equinox, was now past. It would appear that by this time all hope of completing the voyage during the present season † was abandoned,

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9 Ἰκανοὺ δὲ χρόνου διαγενο-  
μενου, καὶ οὐτος ἤδη ἐπισφαλούς  
του πλους, διὰ το καὶ τὴν νη-  
στειαν ἤδη παρελθυθῆναι παρ-  
ῇναι ὁ Παῦλος,

9 Now when much time was  
spent, and when sailing was  
now dangerous, because the  
fast was now already past,  
Paul admonished *them*,

---

\* V. 9. ἐπισφαλούς του πλους, the appropriate nautical term, πλους ασφαλῆς, Jul. Pollux.

† According to Vegetius, the sailing season did not close so early; he states that "ex die igitur tertio iduum Novembris,

and it became a question whether they should winter at Fair Havens, or move the ship to Port Phenice, a harbour on the same side of Crete, about forty miles farther to the westward.

St. Paul assisted at the consultation, and strongly urged them to remain, addressing them in the following terms:—

“Sirs, I perceive that this voyage will be with hurt and much damage, not only of the lading and ship, but also of our lives.”

10 Λεγων αυτοις· Ανδρες, θεωρω οτι μετα υβρεως και πολλης ζημιας ου μονον του φορτου και του πλοιου, αλλα και των ψυχων ημων, μελλειν εσεσθαι τον πλουν.

11 Ὁ δὲ ἑκατονταρχος τῷ κυβερνήτῃ καὶ τῷ ναυκλήρῳ ἐπειθετο μάλλον ἢ τοῖς ὑπο τοῦ Παύλου λεγομένοις.

12 Ανευθετου δε του λιμενος υπαρχοντος προς παραχειμασιαν οι πλειους εθεντο βουλην αναχθηναι κ̄κειθεν, ει πως δυναιντο κατανησαντες εις Φοινικα παραχειμασαι, λιμενα της Κρητης βλέποντα κατα Λιβα και κατα Χωρον.

10 And said unto them, Sirs, I perceive that this voyage will be with hurt and much damage, not only of the lading and ship, but also of our lives.

11 Nevertheless the centurion believed the master and the owner of the ship, more than those things which were spoken by Paul.

12 And because the haven was not commodious to winter in, the more part advised to depart thence also, if by any means they might attain to Phenice, *and there* to winter; *which is* an haven of Crete, and lieth toward the south west and north west.

usque in diem sextum iduum Martiarum, maria clauduntur. . Nam lux minima noxque proluxa, nubium densitas, aeris obscuritas, ventorum, imbrium, vel nivium geminata sœvitia.” These dates correspond better with their stay in the island.— Chap. xxviii. v. 11. Μετα δε τρεις μηνας ανηχθημεν, &c.

The officers of the ship were, however, of a different opinion, and the centurion naturally deferred to it. The event justified St. Paul's advice. At the same time it may be observed, that a bay, open to nearly one half of the compass, could not have been a good winter harbour.

It was determined at this consultation to attempt to reach Phenice, a harbour of Crete, which looked, according to St. Luke, *κατα Λίβα και κατα Χωρον*, which is rendered in our version, "lieth toward the south west and north west." The intermediate point between these two winds is west; and it is generally understood that the harbour looked to, or was open to, the west. Father Giorgi, aware that if it could be proved Phenice was on the south side of Crete, a ship could not be driven off the island towards the Adriatic Gulf, infers from this that it was at the west end of the island\*, and that the situation of Clauda is uncertain. Dr. Falconer, a man of undoubted learning, admits that it is not easy to determine the exact import of this passage; but supposes it to be "open to both quarters of the heavens from whence these winds proceed, and of course unsheltered from these winds:" he then observes that "this would, according to Vitruvius, leave 105° open to the west.† Such a harbour

\* "Quo modo Phenice Australis si ad eam ex Bonis Portibus Paulus secundo Austro tendebat . . . . incertus est Claudæ situs."—P. 195.

† Grotius takes the same view of the meaning of this pas-



would certainly not be 'commodious to winter in,' and would not have warranted the attempt which was made to move to it."

Although they never reached this harbour, it becomes of importance to ascertain its position; because, unless we do so, we can draw no sound inferences respecting the ship's place when she encountered the gale, a point which it is of importance to determine. Phenice no longer retains its name; there is, indeed, a place named Phœnikias in Pashley's map, not far from the position assigned to it by Strabo and Ptolemy; but this cannot be the port of Phenice, for it is not on the coast; although it may possibly be the city of that name, for Ptolemy mentions both a city and port of Phenice, or rather Phœnix. Lutro, Sphakia, and Franco Castello, places on the south coast of Crete, have each been supposed to be Port Phenice. For our present purpose of ascertaining the ship's course it is not very material which of them is meant: I am, however, satisfied that it is the harbour of Lutro.

This harbour, however, looks to the east. I have already shown that the words of St. Luke in the original are generally supposed to indicate a harbour open in the opposite direction; unless, therefore, we get over this difficulty, we must give up the idea that Lutro is meant. The question as to the import of the passage must depend on the

sage; he remarks, "βλεποντα κατα Λιβα, respicientem *ad* Africum . . . και κατα Χωρον, et *ad* Caurum.

meaning we affix to the preposition “κατα,” in connection with the winds; I apprehend it means “*in the same direction as*” (in Latin, *secundum*); if I am right, βλέποντα κατα λιβα does not mean, as is generally supposed, that it is open to the point *from* which that wind (Libs) blows, but to the point *towards* which it blows—that is, it is not open to the south-west but to the north-east.

Herodotus speaks of a ship being driven κατα κυμα και ανεμων\*; now it is quite clear that, in this sense, a ship driven κατα λιβα must be driven to the north-east. There is a passage in Arrian, still more apposite to this point. In his Periplus of the Euxine he tells us, that when navigating the south coast of that sea, towards the east, he observed during a calm a cloud suddenly arise, “driven before the east wind” † — ἐξερράγη κατ’ ευρον. Here there can be no mistake; the cloud must have been driven to the west. When St. Luke, therefore, describes the harbour of Phenice as looking κατα Λιβα και κατα Χωρον, I understand, that it looks *to* the north-east, which is the point towards which Libs blows; and to the south-east that *to* which Caurus blows. Now this is exactly the description of Lutro, which looks or is open to the east, but, having an island in front which shelters it, it has two en-

\* Lib. iv. c. 110.; in the Latin translation, “*secundum fluctus et ventum.*”

† αφνω νεφελη επαναστασα εξερράγη κατ’ ευρον.—Periplus Euxini, p. 3.

trances, one looking to the north-east, which is *κατα Λίβα*, and the other to the south-east, *κατα Χωρον*. The island is not laid down in Pashley's map; I find it, however, in Lapie's map, and in the French admiralty chart of 1738. There is an anchor laid down inside, showing that it is a har-



bour. I cannot discover in sailing directions, ancient or modern, any hydrographical description of it. I have found it to be the general impression amongst naval officers, acquainted with the navigation of these seas, that there are no ship harbours on the south side of Candia; but this is one of those harbours which, from the configuration of the land, must inevitably fill up in time. A mountain stream flows into it, and it is only necessary to look at the view given in Pashley's Travels\* to see, in the ravine which, in the course of ages, it has hollowed out for itself, a proof that if the harbour could shelter the smallest craft in 1738 it must have been capable of sheltering the largest ships seventeen centuries before.

The next question is, does Lutro agree with the notices of Phenice, which we find in the narrative of the voyage, and in ancient writers? In order to agree with the narrative, the south wind must be a fair wind for a ship going from Fair Havens towards it. The first part of the course must lead a ship *ασπον την Κρητην*, "close past the land of Crete;"

\* Frontispiece to vol. ii.

and the last part must be at a certain distance from the land, for the expression in the fourteenth verse, *ου πολυ*, "not long," shows that they had passed the point where they were close to the land. On consulting the chart of the south coast of Crete, it will be seen that the position of Lutro agrees perfectly with every one of these notices.

Phenice, or rather Phœnix, is mentioned by Strabo, Ptolemy, Stephanus Byzantinus\*, and in the Synecdemus of Hierocles. The last two authors merely mention it as a city of Crete. Hierocles, however, mentions it along with the island of Clauda†; now, that island is exactly opposite to Lutro. According to Strabo, Phœnix is situated on the south side of the narrow part of Crete, which he calls an isthmus, on the north side of which is Amphimalla‡, which also agrees with the situation of Lutro.

Ptolemy mentions both a city and port of Phenice. His longitudes, although they cannot be depended upon for the absolute position of places on the surface of the earth, are extremely useful

\* *Φοινικους πολις Κρητη*.—Steph. Byz.

† *Φοινικη ητοι Αραδεναν νησος Κλαυδος*.—Hierocles.

‡ *το δε ενθεν ισθμος εστιν ως εκατον σταδιων, εχων κατοικιαν προς μεν τη βορειω θαλαττη Αμφιμαλλον, προς δε τη νοτιω Φοινικη των Λαμπιων*.—Lib. x. c. 4.

"From thence is an isthmus of about a hundred stadia, having Amphimalla on the North Sea, and Phœnix of the Lampeans on the south." The isthmus is, as nearly as possible, ten geographical miles, or one hundred stadia across.

in giving the relative positions of places with respect to places situated to the east or west. Now the difference of longitude between the eastern and western extremities of Crete, *Κριου μετωπον ακρον* (Cape St. John), and *Σαμμωνιον ακρον* (Cape Salmone), is, according to him,  $3^{\circ} 5'$ : the actual distance is about 140 geographical miles. Hence the mean length of a degree of longitude in Crete is, according to Ptolemy,  $45\frac{1}{2}$  miles. Port Phenice is placed by him three-quarters of a degree to the east of *Κριου μετωπον*, which is equal to thirty-four geographical miles; the actual distance of Lutro from the same point is thirty-two. He places it  $2^{\circ} 20'$  to the west of Salmone, which is equal to 106 miles; the actual distance on the French chart is 108 miles.\*

The only traveller who has collected evidence upon the spot, bearing upon this point, is Mr. Pashley. It is not so complete as could have been wished, because that part of his work has been left unfinished; he has, however, stated enough to confirm the foregoing evidence. He found, a short distance above Lutro, two villages, bearing the names of Anopolis and Aradhena, and observes that,—

“The mention of an ancient city, called Aradena, along with Anopolis and Port Phoenix in the Synecdemus of Hierocles, seems to point plainly to Lutro, as the site of the last named city.”— Vol. ii. p. 257.

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\* Ptol. lib. iii. c. 17.

Mr. Pashley subsequently visited Lutro, and has marked on his map ruins near it, to which he gives the name of Port Phœnix.

If we compare his map with the notices in Hierocles and Stephanus, it will be found that they throw light on each other. According to Hierocles, Phenice was also named Aradena.\* According to Stephanus,

“Aradena, a city of Crete, also called Anopolis, or Upper Town, because it is upper.”†

Now, upon the map these three places are little more than a mile from each other, and Anopolis is *above* Lutro. I think that we may conclude, therefore, with certainty, that the port of Phenice is the present port of Lutro.

With regard to the position of the island of Clauda there is no difficulty; it is unquestionably the same as the Claudos of Ptolemy, which he places to the south-west of Crete, and the Gozzo of the modern charts. Ptolemy, it is true, places it a degree too far to the west, which is, perhaps, a clerical error; but there is no island nearer his position, or for which it can be mistaken. The mention of it in the Synecdemos of Hierocles along with Port Phenice points, very clearly, to its true position. In many manuscripts it is spelt Cauda,

\* Hierocles merely says, Φοινικη ητοι Αραδενα, which implies that Phenice was also called Aradena.

† Αραδην πολιν Κρητης η δε Ανωπολις λεγεται, δια το ειναι ανω.

which agrees with the spelling of Pliny and Suidas. Pomponius Mela spells it Gaudos\*, which is its present Greek name, Gaudonesi, or, Island of Gaudos, which has been Italianised into Gozzo. We have, therefore, the relative positions of the three places mentioned in the proceedings of the day on which the Apostle and his companions left Crete, the events of which I shall now take into consideration.

\* In some manuscripts of Mela it is spelt Caudos.

## CHAP. III.

## CRETE TO MELITA. — THE GALE.

(Acts, xxvii. 13.)

THE ship, as we have seen, remained wind-bound at Fair Havens till the advanced state of the season rendered navigation dangerous. They had, however, resolved, at the consultation mentioned in the 10th and 11th verses, to move to Port Phenice, as a more secure winter harbour; and a moderate breeze from the south having sprung up, it was considered favourable for their purpose. They accordingly weighed anchor.\* After clearing the harbour, their course, till they had passed Cape

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13 Ὑποπνευσαντος δε Νοτου,  
δοξαντες της προθεσεως κεκρατη-  
κεναι, αραντες ασσον παρελε-  
γοντο την Κρητην.

13 And when the south  
wind blew softly, supposing  
that they had obtained *their*  
purpose, loosing *thence* they  
sailed close by Crete.

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\* *αραντες* may be translated either "weighed" or "set sail;" for ancient authors sometimes supply *τας αγκυρας*, "anchors," and sometimes *τα ιστια*, "sails." See note on v. 4., and by Dindorf on Xenophon, Hellen. vi. 2. Julius Pollux, however, like St. Luke, supplies neither, which is certainly the most nautical way of expressing it; he says, *αιροντες απο της γης*. — Lib. i. 103. In the Romaic (modern Greek version) it is rendered *καμνοντες αρμενα*, "set sail."



Matala, was close to the land. A ship which could not lie nearer to the wind than seven points would just weather that point which bears W. by S. from the entrance of Fair Havens. We see, therefore, the force and propriety of the expression, “*ασσον\** παρελεγοντο την Κρητην” — “they sailed *close* by Crete,” — which the author uses to describe the first part of their passage. From the anchorage at Fair Havens to Cape Matala the distance is four or five miles, and from thence to Port Phenice the distance is thirty-four miles; and, as the bearing of the course is W. N. W., the south wind was as favourable as could be desired, being two points abaft the beam. They had every prospect, therefore, of reaching their destination in a few hours. Their course lay across the great southern bight to the west of Cape Matala. They had not proceeded far (ου πολυ), however, when a sudden change in the weather took place.

“The flattering wind that late with promis’d aid  
From Candia’s bay th’ unwilling ship betray’d,  
No longer fawns beneath the fair disguise,  
But like a ruffian on his quarry flies.”

Falconer’s *Shipwreck*, canto ii.

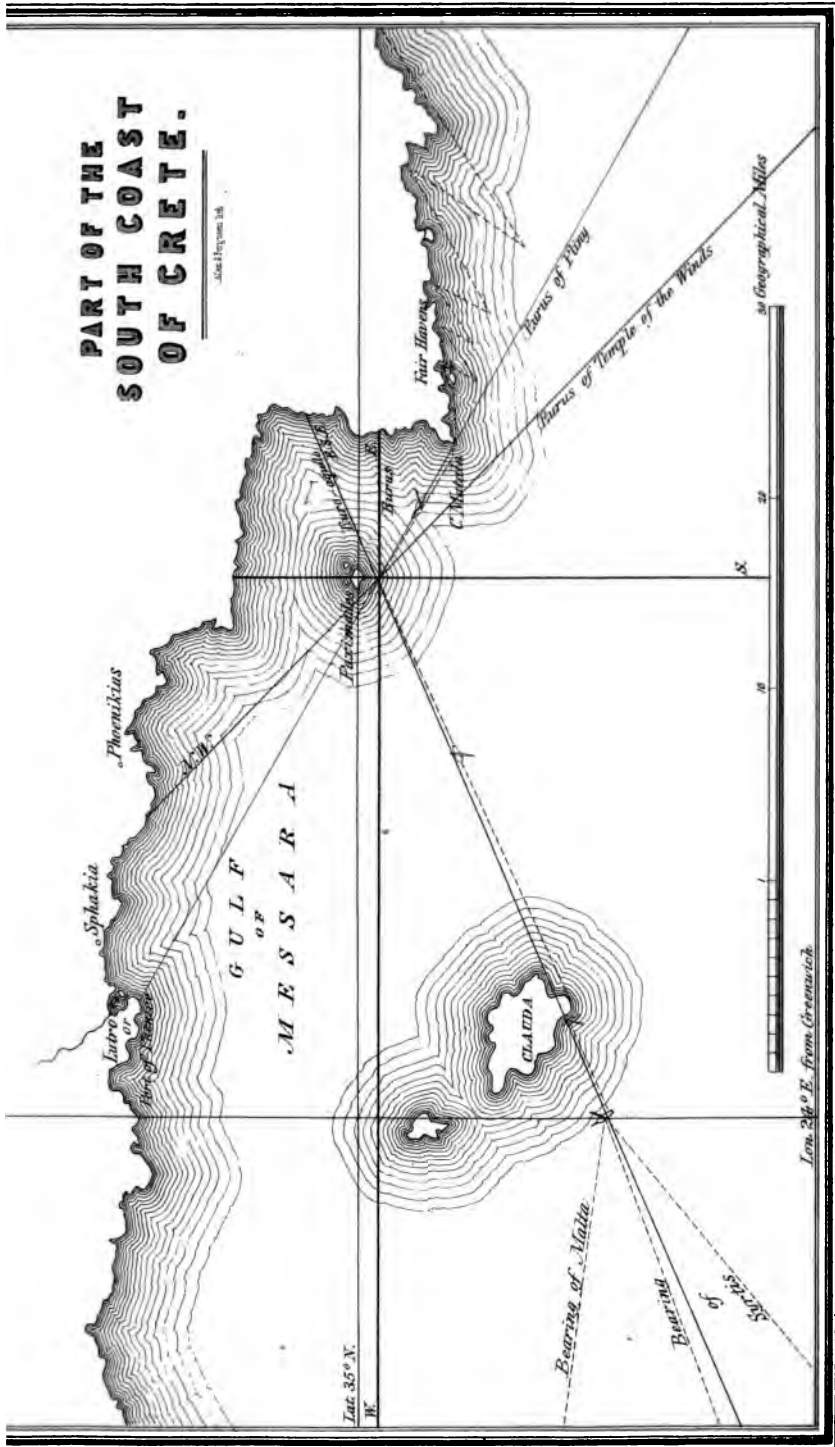
The ship was caught (συναρπασθεντος) in a typhoon (ανεμος τυφωνικος), which blew with such violence that they could not face it†, but were forced, in

\* Ασσον, πλησιον, εγγυς· ασσον ιτε, εγγυς ερχεσθαι.—Hesych.

† αντοφθαλμειν, “to face it;” literally, “to look at it.” The meaning of the expression is sufficiently obvious; the origin of

# PART OF THE SOUTH COAST OF CRETE.

Admiralty Hydrographic Survey.



Lat. 35° N.  
W

Lon. 24° E. from Greenwich



the first instance, to scud before it\*, for such is the evident meaning of the expression — *επιδοντες εφερομεθα* — “yielding to it we were borne along by it.” It follows from this that it must have blown off the land, for had it not they must have been stranded upon the Cretan coast, if they had been unable to gain their harbour. The expression, therefore, *εβαλε κατ’ αυτης*, “there arose against it,” cannot mean that it “arose against Crete,” as some writers contend. The most obvious meaning is that the typhoon struck the ship. It is quite true that, according to strict grammatical rule, the pronoun should stand for the last-mentioned noun; yet in practice it frequently refers to what is uppermost in the mind of the person who uses it at the time.†

14 Μετ’ ου πολυ δε εβαλε  
κατ’ αυτης ανεμος τυφωνικος ο  
καλουμενος Ευρακυλων.

15 Συναρπασθεντος δε του  
πλοιου, και μη δυναμενου αντο-  
φθαλμειν τψ ανεμψ, επιδοντες  
εφερομεθα.

14 But not long after there  
arose against it a tempestuous  
wind called Euro-aquilo.

15 And when the ship was  
caught, and could not bear up  
unto the wind, we let her drive.

it is probably drawn from the practice of the ancients of painting an eye on each side of the bow of their ships, a practice which still prevails in the coasting craft in the Mediterranean.

\* The appropriate nautical term, equivalent to the English one, to scud, is, *ανακωχεειν*, “*dicitur cum exorta tempestate in mari demptis velis navigium ventis sine repugnatione permittitur.*” — *Suidas*. The translation of Giorgi expresses the same meaning, “*non potente aspicere contra ventum, concedentes ferebamur.*”

† Dr. Johnson remarks on the omission of the nominative

St. Luke, who was in the ship, could not avoid thinking of its effects on the ship, but would certainly never dream of its effects upon an island. We know that it blew them out of their course towards the island of Clauda; if, therefore, we know whereabouts the ship was when the gale overtook her, we can form a tolerable estimate of the direction of the wind which drove them thither. According to the narrative, it was not long “*ου πολυ*,” after the ship was close to Crete, which can only mean that she had not passed over much of the space interposed between that point and the intended termination of her voyage, Port Phenice. The term employed by the evangelist is a relative one, and must mean less than the half. Hence the ship must have been somewhere between Cape Matala, and a point bearing W. N. W., distant seventeen miles. But the former point bears E.  $7^{\circ}$  N. from Clauda, to which they were driven, and the latter E.  $43^{\circ}$  N. The wind, therefore, which drove them thither, must have been to the north of E.  $7^{\circ}$  N., but to the east of E.  $43^{\circ}$  N. The intermediate point, which cannot be so much as a point and a half from the true direction, is E.  $25^{\circ}$  N., or E. N. E.  $\frac{1}{4}^{\circ}$  N. Another circumstance mentioned in the narrative,

“*My father*,” at the commencement of *As You Like it*: — “What is there in this difficult or obscure? The nominative ‘*My father*,’ is certainly left out; but so left out that the auditor inserts it in spite of himself.” — *Note on passage.*

indicates the direction of the wind within still narrower limits. When under Clauda they were apprehensive of being driven towards the Syrtis (v. 17.); but the winds, which blow from Clauda towards the Syrtis, range between E.  $18^{\circ}$  N. and E.  $37^{\circ}$  N., the mean of which is E.  $27^{\circ} 30'$  N., and the mean of both deductions is E.  $26^{\circ} 15'$  N., or about E.N.E.  $\frac{1}{2}^{\circ}$  N., which cannot deviate so much as one point from the true direction of the wind, and does not differ a quarter of a point from the former determination.

Writers, such as Bentley and Penn\*, who have drawn their conclusions from etymological reasons, infer that the wind was from the point between Eurys and Aquilo, or E. N. E. We have, therefore, three separate modes of estimating the direction of the gale perfectly independent of each other, and none of them differing from the other so much as half a point. Now there is not one circumstance mentioned in the subsequent part of the narrative which is not perfectly accounted for upon the supposition that this was the true direction of the wind; I differ, therefore, from the commentators who think that it was not a "point wind," that is, a wind blowing steadily from one point, for I consider that no change took place in its direction during the remainder of the voyage.

The sudden change from a south wind to a violent northerly wind is a common occurrence in

\* See Appendix for the remarks of these writers.

these seas.\* The term "*typhonic*," by which it is described, indicates that it was accompanied by some of the phenomena which might be expected in such a case, namely, the agitation and whirling motion of the clouds caused by the meeting of the opposite currents of air when the change took place, and probably also of the sea, raising it in columns of spray. Pliny, in describing the effects of sudden blasts, says that they cause a vortex, which is called "typhoon;"† and Gellius, in his account of a storm at sea, notices "frequent whirlwinds," ". . . . and the dreaded appearances in the clouds which they call typhoons"‡

St. Luke, therefore, by the single word "*typhonic*," expresses the nature and violence of the gale, and, by another, its direction. In the dissertation on the wind *Eúroclydon* I have stated my reasons for preferring the reading of the most ancient manuscripts and versions, *Euro-aquilo*, which must be between *Eurus* and *Aquilo*, or E. N. E.

I now proceed to inquire into the effects it pro-

\* Capt. J. Stewart, R. N., in his remarks on the Archipelago, observes, "It is always safe to anchor under the lee of an island with a northerly wind, as it dies away gradually; but it would be extremely dangerous *with southerly winds, as they almost invariably shift to a violent northerly wind.*"

† Lib. ii. c. 48. De repentinis Flatibus: "Vorticem faciunt qui Typhon vocatur."

‡ Lib. xix. c. i. "Turbines etiam crebriores . . . et figuræ quædam nubium metuendæ quas *τυφώνας* vocabant." Hesi-chius merely calls it the "great wind," *τυφῶν ὁ μέγας ἀνεμος*.

duced upon the ship. Nothing more is said in the narrative than that it defeated their object of reaching Port Phenice, and forced them to run under the lee (*ὑποδραμοντες*\*) of Claudia. It will, however, be found that the ship must have strained and suffered severely in her hull, and that the leaks she then sprang were gradually gaining upon the crew, and that if they had not providentially made the land, and been thereby enabled to save their lives by running the ship on shore, she must have foundered at sea, and all on board perished.

As the knowledge of this fact can only be gained by circumstantial evidence, and as it throws a clear light upon the subsequent proceedings, it is necessary to state the proofs at some length; but before I do so I would observe that such a result of a typhoon, not unfrequent in modern times, seems to have been almost inevitable in ancient times. Pliny calls the typhoon —

16 Νησιον δε τι ὑποδραμοντες,  
καλουμενονΚλανδην, μολις ισχυ-  
σαμεν περικρατεις γενεσθαι της  
σκαφης.

16 And running under a  
certain island, which is called  
Clauda, we had much work to  
come by the boat.

\* *ὑποδραμοντες*, "*running* under the lee of." St. Luke exhibits here, as on every other occasion, the most perfect command of nautical terms, and gives the utmost precision to his language by selecting the most appropriate; they ran before the wind to leeward of Claudia, hence it is *ὑποδραμοντες*; they sailed with a side wind to leeward of Cyprus and Crete; hence it is *ὑπεπλευσαμεν*.



“The chief pest of seamen, destructive not only to the spars but to the hull\* itself.”

In the accounts of shipwrecks which have come down to us from ancient times, the loss of the ship must, in a great number of instances, be ascribed to this cause. Josephus tells us that on his voyage to Italy the ship sank in the midst of the Adriatic Sea.† He and some of his companions saved themselves by swimming; the ship, therefore, did not go down during the gale, but in consequence of the damage she sustained during its continuance. One of St. Paul’s shipwrecks must have taken place under the same circumstances; for he tells us, “a day and a night I have been in the deep,” supported, no doubt, on spars or fragments of the wreck. In Virgil’s description of the casualties of the ships of Æneas, some are driven on rocks, others on quicksands; but,

“*Laxis laterum compagibus omnes  
Accipiunt inimicum imbrem, rimisque fatiscunt.*”

The fact, that the ships of the ancients were provided with hypozomata, or cables ready fitted for undergirding, as a necessary part of their stores, proves how liable they were to such casualties, and, I may add, as another proof, the frequent notice of lightening ships we meet with in ancient authors.

\* “*Precipua navigantium pestis non antennas modo verum ipsa navigia contorta frangens.*”—Lib. ii. cap. 48.

† βαπτισθεντος γαρ ημων του πλοιου κατα μεσον την Αδριαν — Vita, c. iii.

In the present narrative they occur not less than three times. In the ship of Jonah it is stated that "they cast forth the wares that were in the ship into the sea to lighten it" (c. i. v. 5.); and Juvenal, in describing the dangers encountered by Catullus, not only uses similar language, but assigns the reason —

"Cum plenus fluctu medius foret alveus,  
 . . . . . decidere jactu." *Sat.* xii. v. 30.

It is easy to account for the comparative immunity of modern ships from such casualties. The most obvious cause is the improvement in naval architecture; but another, and, I suspect, more efficient one, is the manner in which they were rigged. In modern times the strain is spread over three masts, with small sails, which can be quickly taken in; but the ancient ships had to sustain the leverage of a single mast, with a ponderous yard at the upper end. We can scarcely suppose that St. Paul's ship escaped uninjured. The circumstances mentioned, of her being undergirded, lightened, and finally run ashore, afford conclusive evidence that she did not.

Keeping this in view, we may form some idea of the hardships the ship's company endured. St. Luke shared them all; but he never mentions them, except on one occasion, and that was to illustrate a passage in the life of St. Paul.

At the time the ship was caught in the gale, she

must have been near a small group of islands, called the Paximades, in the Gulf of Messara. The island of Claudia lay about twenty-three miles to leeward, and thither they were driven, as the expression *επιδοντες εφευμεθα* (v. 15.) implies, before the gale. Upon reaching it they availed themselves of the smooth water under its lee, to prepare the ship to resist the fury of the storm. Their first care was to secure the boat, by hoisting it on board. This had not been done at first, because the weather was moderate, and the distance they had to go short. Under such circumstances, it is not usual to hoist the boats on board, but it had now become necessary. In running down upon Claudia it could not be done, on account of the ship's way through the water. To enable them to do it, the ship must have been rounded to, with her head to the wind, and her sails, if she had any set at the time, trimmed, so that she had no headway, or progressive movement. In this position she would drift, broadside to leeward. I conclude that they passed round the east end of the island; not only because it was nearest, but because there are dangers at the opposite end.\* In this case the ship would be brought to on the starboard tack,—

\* "An extensive reef, with numerous rocks, extends from Gozo to the N. W., which renders the passage between the two isles very dangerous." — *Sailing Direct.* p. 207. "On peut passer entre Gozo et Gozo Pulo; mais il faut de la pratique, et nous ne voyons pas la nécessité de s'engager dans un passage dangereux." — *Manuel de Pilotage*, p. 412.

that is, with the right side to windward. This must be kept in mind, because it throws light upon a subsequent passage. St. Luke tells us that they had much difficulty in securing the boat. (v. 16.) He does not say why; but independently of the gale which was raging at the time, the boat had been towed between twenty and thirty miles after the gale sprung up, and could scarcely fail to be filled with water. Having accomplished this necessary task, their next care was to undergird the ship, which the state in which she was had rendered imperative. This expedient is so rarely had recourse to in modern times, that I have only met with one naval officer who had seen it put in practice, although almost all of my nautical friends whom I have consulted, could furnish me with instances in which they had heard of its being done. The officer to whom I allude, Mr. Henry Hartley, who was master of the Royal Sovereign, was employed in 1815, to pilot the Russian fleet from England to the Baltic. One of the ships (the Jupiter) was frapped round the middle by three or four turns of a stream cable. Mr. Hartley is father to the talented marine painter, Mr. Hartley of Jersey; and it was under his direction that the undergirding is represented in the view which I have given of the ship anchored by the stern.

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17 Ἦν γρᾶντες, βοηθεῖ-  
αις ἐχρῶντο, ὑποζωννύντες το  
πλοῖον.

17 Which when they had  
taken up, they used helps, un-  
dergirding the ship;

The mode in which ships are undergirded is thus described by Falconer, in his *Marine Dictionary*:—

“To frap a ship (*ceinturer un vaisseau*) is to pass four or five turns of a large cable-laid rope round the hull or frame of a ship, to support her in a great storm, or otherwise, when it is apprehended that she is not strong enough to resist the violent efforts of the sea: this expedient, however, is rarely put in practice.”

It would not be difficult to multiply instances where this mode of strengthening ships has been put in practice in modern times \*; I content myself with the latest I can find. Captain (now Sir George) Back, on his perilous return from his Arctic voyage, in 1837, was forced, in consequence of the shattered and leaky condition of his ship, to undergird her. It was thus done:—

“A length of the stream chain-cable was passed under the bottom of the ship four feet before the mizen mast, hove tight by the capstan, and finally immovably fixed to six ring-bolts on the quarter-deck. The effect was at once manifested by a great diminution in the working of the parts already mentioned; and in a less agreeable way, by impeding her rate of sailing; a trifling consideration, however, when compared with the benefit received.”†

We are told, that subsequent to this they met with a gale:—

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\* The Albion 74 encountered a hurricane on her voyage from India, and was under the necessity of frapping her hull together, in order to prevent her sinking.—*United Service Mag.*, May, 1846. The Queen came home from Jamaica frapped or undergirded; and the Blenheim, in which Sir Thomas Troubridge was lost, left India frapped.

† Voyage, p. 433.

"The water rushed in violently below, more especially about the sternpost and heel-hook, and oozing through different parts higher up, fell like a cascade into the bread-room and run . . . while apprehensive that farther injury had been sustained about the keel, another length of chain was passed under the bottom and set well tight to a part of itself, across the after-part of the quarter-deck." — p. 438.\*

We are next told by St. Luke, that "being apprehensive of being driven towards the Syrtis, they lowered the gear." It is not easy to imagine a more erroneous translation than that of our authorised version: —

"Fearing lest they should fall into the quicksands, strake sail, and so were driven."—Verse 17.

It is, in fact, equivalent to saying that, fearing a certain danger, they deprived themselves of the only possible means of avoiding it.† It is not by

Φοβούμενοι τε μη εἰς τὴν Συρτιν  
ἐκπεσῶσι, χαλασάντες τὸ σκευός,  
οὕτως ἐφέροντο.

And, fearing lest they should  
fall into the quicksands, strake  
sail, and so were driven.

\* See details of undergirding in dissertation on antient ships.

† Of course if any sail was set it could not be the mast which was lowered, as many commentators suppose; indeed it is not possible to suppose that the main-masts of large sailing ships were made to strike, like those of a Thames barge, although no doubt those of the row-galleys were: —

—— Εὐ δὲ καὶ αὐτὸν

ἴστον ἀφάρ χαλασάντο.

APOLLONIUS RHODIUS, ii. 1267.

Juvenal tells us that the mast of the ship of Catullus was "cut away" (*Sat.* xii. 54.), and recommends his friends to provide themselves with hatchets before going to sea.

"Adspice sumendas in tempestate secures." *Ib.* 61.

striking mast or sail that such dangers are to be avoided.

I have already shown that the same wind which drove them, "when yielding to it" (*επιδοντες*), to Clauda, would, if they had continued to scud, have driven them directly towards the Syrtis. Under the circumstances in which they were now placed, they had but one course to pursue in order to avoid the apprehended danger, which was to turn the ship's head off shore, and to set such sail as the violence of the gale would permit them to carry. As they did avoid the danger, we may be certain notwithstanding the silence of the historian, that this was the course which was adopted. I have already assigned my reasons for supposing that the ship must have been brought to on the star-board tack, under Clauda, for it was only on this tack that it was possible to avoid being driven on the African coast; when, therefore, they had taken every precaution against foundering which prudence and skilful seamanship could dictate, all that was required was to fill their storm sail, probably already set, and to stand on.

The question remains to be answered, What is the meaning of the expression "lowering the gear," "*χαλασαντες το σκευος*"? *Σκευος*, which I have translated literally "gear,"\* when applied to a ship,

\* Rightly translated by Bökh "*Geräthe*;" Scotice, "*Graith*." "*There I beheld a galeasse gaily graithit for the weyr, ly-and fast at ane ankir.*"—*Complaynte of Scotland*. i. e. "*Gal-*

means appurtenances of every kind, such as spars, sails, rigging, anchors, and cables, &c. Now, every ship situated as this one was, when preparing for a storm, sends down upon deck the "top hamper," or gear connected with the fair-weather sails, such as the *suppara*, or top-sails. A modern ship sends down top-gallant masts and yards\*, a cutter strikes her topmast, when preparing for a gale. The author here, as elsewhere, states the fact, but gives no details; a seaman could scarcely have avoided doing so, if he had mentioned the circumstance at all. It is unnecessary to multiply instances which are so common as to occur in almost every account of a storm at sea; I content myself, therefore, by giving a parallel case with the present, namely, that of one who was not a seaman, but was perfectly cognisant of nautical matters, Donald Campbell, of Barbreck.† On his passage from Goa to Madras he was shipwrecked on the coast of Malabar. Many of the events bear a striking resemblance to those recorded by St. Luke in his account. "Lowering the gear" is mentioned in the following terms:—

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lantly furnished for the war." M. Jal, whose courage as a translator is more conspicuous than his caution, amusingly renders it—"Qui virait gaiement sur l'ancre."

\* Gower, in his Treatise on Seamanship, gives the following instructions for preparing for a gale:—"Let the top-gallant yards and masts, mizen topsail yard, mizen-yard, and cross-jack yard be got down on deck, that the ship may be made as snug as possible."—P. 54.

† Journey to India, pt. iii. p. 16.



“Such exertions were made that, before morning, every stick that could possibly be struck was down upon the deck.”

The only plausible conjecture I have met with respecting what was lowered, is that of Pricæus, who supposes it was “not the mast, but the yard with the sail attached to it.”\* This, indeed, is but a conjecture, but it is a probable one. We know from the representations on coins and marbles, that the ancients were in the habit of furling their sails aloft; and unless the main-yard was lowered when the ship was running before the wind, which we are not told was the case, it must have been done now. This, however, is but conjecture; and, in such an inquiry as the present, it is necessary to distinguish between conjecture and inference. We may conclude, with perfect certainty, that their object, in “lowering the gear,” was to enable them to avoid the Syrtis; because we are, in effect, told that it was so, “fearing lest they should be driven to the Syrtis, they lowered the gear.” This alone, however, was not sufficient to have kept the ship off a lee shore. There were but two ways by which that could have been effected. She might have been anchored†, or her head might have been turned off shore and such sail set as the violence of the gale would permit her to carry. We know that

\* “Non malum, sed cum appenso velo antennam.”—*Pricæus* in loc.

† There is an anchorage at Clauda; but it is open to the E. N. E., and therefore would have afforded no shelter in the present case.

the first of the alternatives was not adopted; we must, therefore, conclude that the last was, for by no other way could she have avoided the apprehended danger.

A ship at sea, in a gale, must either scud or heave-to. In the present case, to have adopted the former alternative, would have been to have rushed on certain destruction. Falconer, in his notes on the Shipwreck, observes:—

“The movement of scudding is never attempted in a contrary wind unless, as in the present instance, the condition of the ship rendered her incapable of any longer sustaining on her side the mutual effort of the wind and waves. The principal hazards incident to scudding are generally—a *pooping* sea; the difficulty of steering, which exposes the vessel perpetually to the risk of broaching-to; and the want of sufficient sea-room. A sea striking the ship violently on the stern may dash it inwards, by which she must inevitably founder; in broaching-to suddenly, she is threatened with being immediately overset; and for want of sea-room she is endangered with shipwreck on a lee shore, a circumstance too dreadful to require explanation.”

This last must have been the inevitable consequence, had the ship been allowed to be driven at the mercy of the winds, as is generally supposed.

The only question which now remains to be answered is, Which tack was the ship hove-to upon? The answer is not difficult: if it had been on the port tack, that is, with her left side to the wind, she must have inevitably drifted upon the coast of Africa with the wind at E. N. E., as we have proved

it to have been \*, and would, moreover, have been driven completely out of her course.

We are thus forced to the conclusion, when we are told that "they were thus borne along," *οὕτως εφεροντο*, that it was not only with the ship undergirded and made snug, but that she had storm sails set †, and was on the starboard tack, which was the only course by which she could avoid falling into the Syrtis. With this notice concludes the first eventful day.

On the following day (*τη ἑξῆς*, ver. 18.), the gale continuing unabated, they lightened the ship ‡. Every step hitherto taken indicates skilful seamanship. In an old French work on maritime law § I find every one of these precautions pointed out as proper

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18 Σφοδρως δε χειμαζομενων  
ημων, τη ἑξῆς εκβολην εποιουν-  
το.

18 And we being exceed-  
ingly tossed with a tempest,  
the next day they lightened  
the ship ;

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\* See Dissertation on Euroclydon.

† "In a storm with a contrary wind or on a lee shore, a ship is obliged to lie-to under a very low sail; some sail is absolutely necessary to keep the ship steady, otherwise she would pitch about like a cork, and roll so deep as to strain and work herself to pieces."—*Encyc. Brit.*, Art. Seamanship.

‡ The technical terms for taking cargo out of a ship, given by Julius Pollux, are, *εκθεσθαι, αποφορτισασθαι, κουφισαι την νανν, επελαφρυναι, εκβολην ποιησασθαι των φορτιων*. So that both here and afterwards in the 38th verse, when St. Luke says *εκουφιζον το πλοιον*, he uses appropriate technical phrases.

§ *Us et Coutumes de la Mer*. Rouen, 1672.

to be taken by able mariners under similar circumstances.

1st. With regard to undergirding the author observes: —

“Il y a des mariniers habiles, lesquels prévoyantes les tourmentes, plongent en l'eau, ceignent ou rident par bas tout le corps du navire avec des guerlins nommez en Levant *gomenes*, c'est à dire, grosses cordes, ce qui l'*assiste* et le rend plus puissant à résister aux secousses.” — p. 528.

2nd. “Lowering the gear:” —

“*Abaïsser* les mats de hune ou *matereaux*.”

3rd. “Heaving the ship to:” —

“Dans le péril convient caposer ou mettre le navire à la cape, c'est à dire, amarrer le gouvernail bien ferme et immobile pour suivre l'abandon du vent; trousser toutes les voiles sauf le pafi (mainsail, old French), qu'on laisse boursoffler, d'autant que le vent s'enfermant en iceluy pousse en haut le vaisseau le soulagent beaucoup au hurt et à la tombée.”

4th. “Lightening the ship:” —

“Pour prévenir le malheur en ces occurrences et pour se conserver, le jet est nécessaire, ‘echason a la mar de lo qui viene en la nave para salvarla.’”

On the third day they threw overboard “the tackling of the ship” (ver. 19.). From the expression “with our own hands,” *αυτοχειρες*, I suppose the mainyard is meant; an immense spar, probably as long as the ship, and which would require the united

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19 Καὶ τῇ τρίτῃ, αυτοχειρες  
την σκευὴν τοῦ πλοίου ἐρίψα-  
μεν.

19 And the third *day* we  
cast out with our own hands  
the tackling of the ship.

efforts of passengers and crew to launch overboard. The relief which a ship would experience by this, would be of the same kind as in a modern ship when the guns are thrown overboard.

A dreary interval of eleven days succeeds ; the gale continues with unabated fury (σφοδρως δε χειμαζομενων) ; neither sun nor stars can be observed ; and at length we are told that "all hope of being saved was taken away." But why was all hope taken away ? An ancient ship, without a compass and without celestial observation, had no means of keeping a reckoning. This was, no doubt, a situation of danger, but not one of despair, for she might have been driven into safety. The true explanation I apprehend is this : their exertions to subdue the leak had been unavailing ; they could not tell which way to make for the nearest land, in order to run their ship ashore, the only resource for a sinking ship ; but unless they did make the land, they must founder at sea. Their apprehensions, therefore, were not so much caused by the fury of the tempest, as by the state of the ship.

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20 Μητε δε ηλιου, μητε αστρων επιβαινοντων επι πλειονας ημερας, χειμωνος τε ουκ ολιγου επικειμενου, λοιπον περιηρειτο πασα ελπις του σωζεσθαι ημας.

21 Πολλης δε ασιτιας υπαρχουσης, τοτε σταθεις ο Πανλος εν μεσω αυτων, ειπεν·

20 And when neither sun nor stars in many days appeared, and no small tempest lay on *us*, all hope that we should be saved was then taken away.

21 But after long abstinence Paul stood forth in the midst of them, and said,

We are now told that after much abstinence Paul addressed them; but before we hear his address the question occurs, what caused the abstinence? A ship with nearly three hundred people on board, on a voyage of some length, must have had more than a fortnight's provisions; in point of fact, the ship was loaded with wheat, as we learn afterwards; and it is not enough to say that, "worn out with their labours and fears they did not think of eating."\* Now, although the connection between heavy gales and "much abstinence" is by no means obvious, yet we find it is one of their most frequent concomitants. The impossibility of cooking, or the destruction of provisions from leakage, are the principal causes which produce it. Breydenbach, the dean of Mentz, in his pilgrimage to the Holy Land, experienced two gales of wind†, and very feelingly records the abstinence that ensued on each occasion. In one case a sea struck their vessel, and "destroyed their caboose or cooking-place, and broke every thing within it;"‡ in

\* "Continui labores et metus a periculis effecerant ut de cibo capiendo non cogitarent." — *Kuinoel*.

† Mentz, 1486. See account of this curious work in Dibdin's *Ædes Althorpianæ* and the *Journal of the Geographical Society*, vol. ix. p. 311.; as it is not paged, I count the leaves from the end.

‡ "Una vi ventorum acta ad latus nostræ galeæ grandi impetu impigit vehementer barcamque collateralalem dirupit penitus, et destruxit nostram vero coquinam fregit earum et omnia quæ in ea erant." — 19th leaf from the end. On the same leaf

the other he tells us "there was no thought of eating or drinking, because the cooking-place was altogether under water."\* John Newton, the celebrated vicar of Olney, in his interesting autobiography, relates a circumstance which occurred in his own experience of sea life; on a voyage from Cape Lopez a sea struck his ship, and strained her so much that she nearly foundered.

"We found that the water having floated all our movables in the hold, all the casks of provisions had been beaten in pieces by the violent motion of the ship. On the other hand, our live stock, such as pigs, sheep, and poultry, had been washed overboard in the storm; in effect, all the provisions we saved . . . . would have subsisted us but a week, at a scanty allowance."—*Omicron's Letters*, letter vii.

In the case of the Guipiscoa, the Spanish ship mentioned in Anson's Voyage, those who could work at the pumps were reduced to an ounce and a half of biscuit per diem; those who could not, were allowed an ounce of wheat. To some such

will be found the following invocation by the mariners to the Virgin, which I have not met with elsewhere:—

"Salve, Splendor Firmamenti !  
 Tu caliginosæ menti  
 Desuper irradias.  
 Placa mare, Maris Stella !  
 Ne involvat nos procella  
 Et tempestas obvia."

\* "Nec fuit memoria cibi aut potus hac tempestate, quia coquina erat in aquis tota."—*Ib.* 17th fol. from end.

cause the abstinence mentioned by St. Luke may, doubtless, be ascribed.

The hardships which the crew endured during a gale of such continuance, and their exhaustion from labour at the pumps and hunger, may be imagined, but are not described. Under these circumstances, St. Paul encourages them by the assurance that their lives would be spared. He thus addresses them: —

“Sirs, ye should have hearkened unto me, and not have loosed from Crete, and to have gained this harm and loss. And now I exhort you to be of good cheer: for there shall be no loss of *any man's* life among you, but of the ship. For there stood by me this night, the angel of God, whose I am, and whom I serve, saying, Fear not, Paul; thou must be brought before Cæsar: and, lo, God hath given thee all them that sail with thee. Wherefore, sirs, be of good cheer: for I believe God, that it shall be even as it was told me. Howbeit we must be cast upon a certain island.”

Εδει μεν, ω ανδρες, πειθαρχη-  
σαντας μοι, μη αναγεσθαι απο  
της Κρητης, κερδησαι τε την  
υβριν ταυτην και την ζημιαν.

22 Και τανυν παραινω υμας  
ευθυμειν· αποβολη γαρ ψυχης  
ουδεμια εσται εξ υμων, πλην του  
πλοιου.

23 Παρεστη γαρ μοι τη  
νυκτι ταυτη αγγελος του Θεου,  
ου ειμι ψ και λατρενω

24 Λεγων, Μη φοβου, Παυλε·  
Καισαρι σε δει παραστηναι·  
και ιδου κεχαρισται σοι ο Θεος,  
παντας τους πλειοντας μετα  
σου.

Sirs, ye should have hear-  
kened unto me, and not have  
loosed from Crete, and to have  
gained this harm and loss.

22 And now I exhort you to  
be of good cheer: for there shall  
be no loss of *any man's* life  
among you, but of the ship.

23 For there stood by me  
this night the angel of God,  
whose I am, and whom I serve,

24 Saying, Fear not, Paul;  
thou must be brought before  
Cæsar: and, lo, God hath given  
thee all them that sail with  
thee.



At length, on the fourteenth night of their being “driven through” (διαφερομενων) the sea of Adria, towards midnight the seamen suspected (ὑπεννοουν) that land was near. (προσαγειν αυτοις, literally, was nearing them.\*) St. Luke does not tell us what the indications were; and the only conjecture I have seen, is that of Calmet, that they became aware of it by the sense of smell. He says:—

“Ils soupçonnèrent l’approche de la terre, non par la vue, parceque c’était à minuit et qu’ils étaient dans des profondes ténèbres, mais apparemment par l’odeur de la terre, ou par la fraîcheur, ou par le vents.”

But all these conjectures require off-shore winds.

25 Διὸ ἐνθυμείτε, ἄνδρες· πιστευω γὰρ τῷ Θεῷ ὅτι οὕτως ἔσται καθ’ ὃν τρόπον λελαλήται μοι.

26 Εἰς νησον δε τινα δεῖ ἡμᾶς ἐκπεσεῖν.

27 Ὡς δὲ τεσσαρεσκαίδεκατῇ νυξὲ ἐγένετο, διαφερομενων ἡμῶν ἐν τῷ Ἀδρια, κατὰ μεσον τῆς νυκτός ὑπεννοουν οἱ ναυται προσ-αγειν τινα αὐτοῖς χωραν.

25 Wherefore, sirs, be of good cheer: for I believe God, that it shall be even as it was told me.

26 Howbeit we must be cast upon a certain island.

27 But when the fourteenth night was come, as we were driven up and down in Adria, about midnight the shipmen deemed that they drew near to some country;

\* St. Luke here uses the graphic language of seamen to whom the ship is the principal object, whilst the land rises and sinks, nears, and recedes—

“Terræque urbesque recedunt.”

The word χωραν evidently means the land as distinguished from the sea.

A storm on the face of a lee shore is not the time when —

“ Gentle gales,  
Fanning their odoriferous wings dispense  
Native perfumes, and whisper whence they stole  
Their balmy spoils.”

The only other conjecture is, that they saw or heard the breakers on a rocky coast —

“ In dire amazement riveted they stand,  
And hear the breakers lash the rugged strand.”

FALCONER.


Such are the usual premonitory warnings to ships unexpectedly falling in with the land at night.

If we assume that St. Paul's Bay, in Malta, is the actual scene of the shipwreck, we can have no difficulty in explaining what these indications must have been. No ship can enter it from the east without passing within a quarter of a mile of the point of Koura; but, before reaching it, the land is too low, and too far from the track of a ship driven from the eastward, to be seen in a dark night. When she does come within this distance, it is impossible to avoid observing the breakers; for, with north-easterly gales, the sea breaks upon it with such violence, that Captain Smyth, in his view of the headland, has made the breakers its distinctive character.

By a singular chance I can establish an important link in the chain of evidence respecting the identity of this locality, namely, that the distance

at which the breakers could be seen here is about a quarter of a mile, and that they are seen at this distance when the land itself is not seen.

On one of those rare occasions when there was no ground swell and a boat could land on the point of Koura, I landed with my friend the Rev. Mr. Robertson, of Saline, and was engaged in demonstrating to him, upon the spot, how rigidly every one of the conditions required to make it agree with the narrative were here fulfilled. To the east lay the low and receding shores of Malta, nowhere "approaching" within a mile of the track of a ship coming from Clauda, and which, therefore, could not be seen on a night such as that described in the narrative. In the opposite direction the shore, begirt with mural precipices (*τραχεις τοπους*), where a ship would be dashed to pieces, but with "creeks with shores," into which she might be thrust; and on the rocks where we stood, not more than twenty feet above the surface of the sea, and totally destitute of vegetation, lay huge fragments of rock, forcibly torn up by the waves, and lodged at least twelve feet above the level of a tideless sea, affording no doubtful evidence of what must have been the force of the breakers in a gale from the Greco Levante, E.N.E. (Euro-aquilo), the point to which it is most exposed. One of our boatmen, who was listening attentively, said he knew what I was speaking about, and could point out the spot of the shipwreck; that he was a boy when it happened,



5





KOURA POINT WITH THE TOWER AND BATTERY OF THE UNIVERSITY

Alfred Sturges, M. C.



and had gone to see the ship next day. This produced an explanation. He told us that thirty or forty years ago, the *Lively*, frigate, fell in unexpectedly with the point, in a dark night, and, missing stays, had run ashore at a spot which he showed us, and that, a gale coming on, she had gone to pieces.

Struck with the coincidence, on my return to England, I applied at the Admiralty, and examined the proceedings of the court martial held on the officers of the ship, from which it appears, that on the 10th of August, 1810, the *Lively*, frigate, coming from the westward with a fair wind, made the land of Gozo, and the west end of Malta, before it was dark. The weather, however, afterwards turned thick, and the land was lost sight of. When the captain (M'Kinlay) went below, he left orders with the master to heave the ship to at a certain hour, in order to get her put in order, before running into the harbour of Valetta next morning. This was accordingly done; but the ship was, unfortunately, and against the opinion of the lieutenant of the watch (Lieutenant, now Captain Berkeley), brought to, with her head in-shore. Soon afterward the quarter-master on the look out gave the alarm of rocks to leeward.\* He

\* In reporting to the master, the quarter-master said there was neither room to tack nor wear, but "if all was thrown aback the ship might back out stern foremost." There can be no doubt but that if this plan had been adopted, the ship would



states, in his evidence, that he did not see the land, but "the curl of the sea" upon the rocks, at the distance of about a quarter of a mile. This was upon the point of Koura, the very spot where a ship driving from the east into St. Paul's Bay must have seen and heard the breakers, and the only spot where she could have done so. Upon perceiving the danger, the order "ready about and *clear the anchor*," was immediately given by Lieutenant Berkeley; and as they were bracing round the main-top-sail to fill upon the ship, the man at the lead *sounded, and found twenty-five fathoms*. Before, however, she had sufficient way upon her, the helm was put down; but the ship missed stays, that is, they could not get her head round on the opposite tack. *The anchor was then let go\**; but before the ship brought up, she fell off broadside on the rocks, and a gale coming on she went to pieces.

Before proceeding to compare the notices in the narrative with the peculiarities of the supposed site,

have drifted clear of the point; but the officers could not know how far the rocks extended, and there was no reason to fear that the frigate, if properly handled, would "miss stays;" this was evidently the opinion of the court, who put repeated questions as to the cause of the ship's not coming round: one of the witnesses attributed it to the confusion caused by the captain's coming suddenly on deck, another to a brace being let go too soon. The master was reduced in rank for bringing the ship to with her head in-shore.

\* This does not appear from the proceedings of the court; but one of our boatmen told us he assisted in sweeping for it, and that it was found many years afterwards.

let us stop to inquire whether the data which this inquiry has furnished us, will not enable us to ascertain, within certain limits, by *à priori* reasoning, whereabouts the ship was, that is, her longitude and latitude, when the "shipmen deemed that she drew near to some country."

I have already shown, from three independent sources, that the wind must have been ENE.  $\frac{1}{4}$ N. to the nearest quarter of a point; and that the ship must have been on the starboard tack, that is, with her head to the north, in order to avoid the Syrtis. The first question which presents itself is, what was the direction of the drift mentioned in the seventeenth verse, "so were driven" (*οὕτως εφεροντο*). The answer depends on the angle the ship's head makes with the wind and the lee-way. But an ancient ship could probably not lie nearer the wind than seven points, which, added to six points of lee-way, makes thirteen points, as the angle which such a ship would probably make with the wind\* ENE.  $\frac{1}{4}$ N. is  $2\frac{1}{4}$  points to the north of east: if we add thirteen to this, it makes the azimuth of the ship's course from Claudia W. by N.  $\frac{1}{4}$ W., or W.  $8^{\circ}$  N., *which is the bearing of Malta to the nearest degree.*

\* I arrive at these results thus: ancient ships could sail on opposite tacks, "in contrariam," (Pliny, ii. 48.), hence they could lie with eight points of the wind, but they certainly could not lie so near the wind as modern ships, say six points; the mean, therefore, is seven points. The lee-way of a ship in a gale varies from  $5\frac{1}{2}$  to  $6\frac{1}{2}$  points; (See Falconer's Marine Dictionary, article Lee-way) the mean of which is six points.

The next point to be ascertained is, how far would she have driven from Clauda about midnight "when the fourteenth night was come." The knowledge of this depends upon the rate of drift and the time consumed. The result which the calculation founded upon these data gives us is so very striking, that I feel called upon to state the elements on which it is founded at some length, lest I should be accused of "cooking" them, that is, of selecting those only which answered my purpose, and rejecting those which did not.

In order to ascertain what might be supposed to be the mean rate of drift of a ship circumstanced as that of St. Paul's was, I consulted two nautical friends, both of them at the time commanding ships in Valetta harbour, and both of them familiar with the navigation of the Levant. To the first of these officers whom I met with (Captain W. M'Lean, R.N.), I put the question, "What would you say would be the probable amount of drift of a ship hove to in a gale of wind?" His answer was, "That depends on the force of the gale and the size of the ship." Upon explaining that I considered it a large ship, even as compared with modern merchantmen, and that the gale might be reckoned as one of mean intensity, he said, after considering the matter, that speaking in round numbers, forty miles in twenty-four hours might be reckoned a fair allowance. I put the same question to Captain Graves, R.N., who replied, "From three-quarters

of a mile an hour to two miles an hour." The mean of these extremes is thirty-three miles in twenty-four hours, and the mean of both estimates is thirty-six and a half miles in twenty-four hours.\*

I come now to the time elapsed. It is quite clear from the narrative, that St. Luke counts the time from the day the ship left Fair Havens. We hear of the "third day" (v. 19.); the preceding is termed "next day," which brings us to the first day, both of the gale and the voyage. It is also clear that the events of that day must have occupied a large portion of it. The time consumed in driving through the Sea of Adria, from the time they left the island of Clauda till they became aware of the vicinity of land at midnight of the fourteenth day, is, therefore, thirteen days complete, and a small fraction. But the distance from Clauda to the point of Koura, where I suppose that this happened, is 476.6 miles†, which, at the rate as deduced from the information of Captains M'Lean

\* When Capt. Graves said from three-quarters of a mile to two miles an hour, I replied, "Very well, I may suppose a mile and a half an hour, about a mean rate," to which he assented.

† This distance is deduced from the position of the places by the following formula :—

	Lat., N.			Lon., E.	
Point of Koura,	35° 56'	mer. parts 2313		14° 25'	
Clauda, 34 52		mer. parts 2235		24 2	
Diff.	- 1° 4' = 64'	Diff. 78	Diff. 9° 37' = 577'		

and Graves, would take exactly thirteen days, one hour, and twenty-one minutes.

The coincidence of the actual bearing of St. Paul's Bay from Clauda, and the direction in which a ship must have driven in order to avoid the Syrtis, is, if possible, still more striking than that of the time actually consumed, and the calculated time.

The direction of the ship's course is inferred from that of the wind, from the angle of the ship's head with the wind, and from the lee-way. I have shown (see p. 59.) that the mean direction of the wind, as deduced from the notices in the narrative, was E.  $26^{\circ} 15'$  N. In the dissertation on ancient ships I have assigned reasons for supposing seven points as the angle a ship's head would make with the wind, which, added to six points for lee-way, makes an angle of  $146^{\circ} 15'$ , which, added to the angle of the wind, makes the azimuth of the ship's course, as drawn from these data, E.  $172^{\circ} 30'$  N., or N.  $82^{\circ} 30'$  W., which agrees with the bearing of St. Paul's

As mer. diff. of lat.		As rad.	-	-	10.000000
78	log.	1.892095	is to diff. lat. $64^{\circ}$	-	1.806180
is to rad.	-	10.000000	so is sec. course		
so is diff., lon. 577		2.761176	$82^{\circ} 17'$	-	12.872007
		<hr/>			<hr/>
		12.761176			12.678187
		1.892395			10.000000
		<hr/>			<hr/>
to tang. course			to distance 476.6		2.678187
$82^{\circ} 17'$	-	10.869081			

Bay,  $82^{\circ} 17'$ , as drawn from the foregoing calculation to  $13'$ , which at the distance between Clauda and Malta is equivalent to about two miles and a half.

Hence, according to these calculations, a ship, starting late in the evening from Clauda, would, by midnight on the 14th, be less than three miles from the entrance of St. Paul's Bay. I admit that a coincidence so very close as this is, is to a certain extent, accidental, but it is an accident which could not have happened had there been any inaccuracy on the part of the author of the narrative with regard to the numerous incidents upon which the calculations are founded, or had the ship been wrecked any where but at Malta, for there is no other place agreeing, either in name or description, within the limits to which we are tied down by calculations founded upon the narrative.

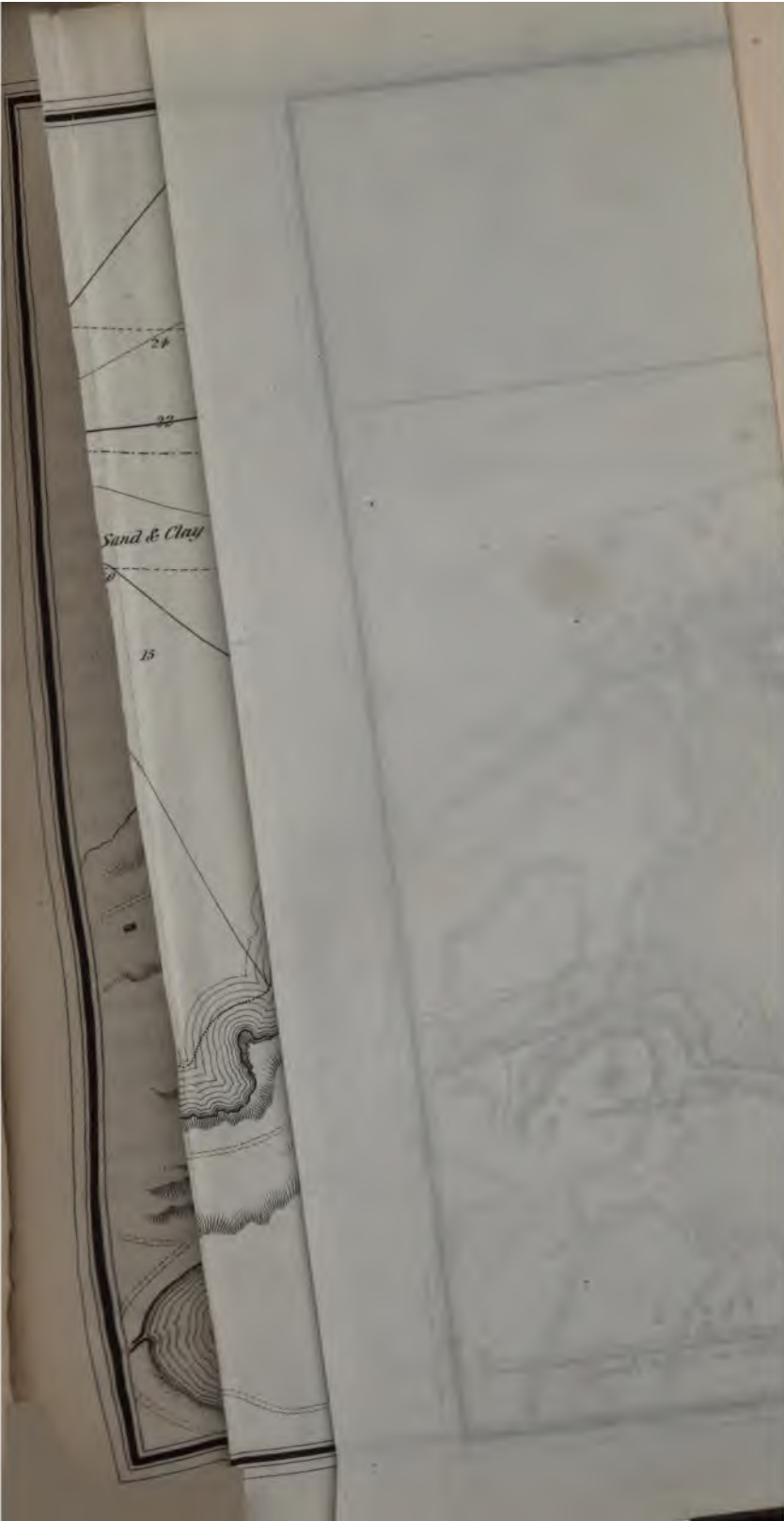
## CHAP. IV.

### THE SHIPWRECK.

THE ship now approaches the termination of her disastrous voyage. Land is not, indeed, in sight, but to the watchful senses of the "shipmen" the sound or appearance of breakers tells them that it is near, or in the nautical language of St. Luke, that it is approaching. Such indications are the usual harbingers of destruction; here they call forth a display of presence of mind, promptitude, and seamanship, which could not be surpassed in the present day, and by which, under Providence, the lives of all on board were saved.

However appalling the alarm of breakers may be to a ship unexpectedly falling in with the land on an unknown coast, and in a dark and stormy night, it afforded in the present case a chance at least of safety. The hope which was taken away is restored. They can now adopt the last resource for a sinking ship, and run her ashore; but, to do so before it was day would have been to have rushed on certain destruction. They must bring the ship, if it be possible to anchor, and hold on till day-break, when they may perhaps discover some "creek with

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a shore," into which they may be able to "thrust the ship."

The progress of the narrative has brought us to the question, Whether the traditional locality is in reality that of the shipwreck. Now, if we attend minutely to the narrative, it will be seen that the number of conditions required to be fulfilled, in order to make any locality agree with it, are so numerous as to render it morally impossible to suppose that the agreement which we find here can be the effect of chance.

The first circumstance mentioned is, that, at midnight the shipmen suspected the vicinity of land evidently without seeing it. The ship was driving from Clauda; her previous track must have been at such a distance from the land, and the land itself must be so low, as to prevent its being seen. Now, upon laying down the track of a ship driving in that direction to St. Paul's Bay, on Captain Smyth's chart of Malta, I find that the land which in that part of the island is very low, no where approaches within a mile of it\*, but that it is impossible to enter the bay without passing within a quarter of a mile of a low rocky point, which juts out and forms its eastern entrance (the point of Koura). When the *Lively*, frigate, unexpectedly fell in with this very point, the quarter-master on

\* Off Valetta the distance of the track of a ship from Clauda to St. Paul's Bay is five miles, it gradually diminishes to one mile.

the look out, who first observed it, states, in his evidence at the court-martial, that at the distance of a quarter of a mile the land could not be seen, but that he saw the surf on the shore. Here, then, we establish the explanation of a hitherto unexplained passage of Scripture, by the oath of a competent witness. Till the ship arrived at the entrance of the bay they could not be aware of the vicinity of land; when they did come to it, they could not avoid becoming aware of it. When they did so, they sounded and found twenty fathoms.\* But a ship coming from the eastward must, immediately after passing the point, pass over this depth.† It is quite true that every ship in approaching the land must pass over twenty fathoms and fifteen fathoms, but here not only must the twenty fathom

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28 Καὶ βολίσαντες, εὗρον  
οργυίας εικοσι· βραχὺ δὲ δια-  
στησαντες, καὶ πάλιν βολίσαντες,  
εὗρον οργυίας δεκαπέντε.

28 And sounded and found  
it twenty fathoms, and when  
they had gone a little farther  
they sounded again and found  
it fifteen fathoms.

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\* The ancient fathom (*οργυία*) so nearly agrees with the English fathom, that the difference may be neglected. According to Hesychius, it is *τα τῶν ἀμφοτέρων χειρῶν ἐκτασις*, the space between both hands extended.

† See chart of St. Paul's bay to the west of the point of Koura. The curved line across the ship's track represents that depth. I have given the soundings as they are laid down in Captain Smyth's chart. Although the depth of twenty fathoms is not marked, we know it must be between seventeen and twenty-one.

depth be close to the spot where they had the indications of land, but it must bear E. by S. from the fifteen fathom depth, and at such a distance as would allow of preparation for anchoring, with four anchors from the stern; for we are not to suppose that ships from sea, unexpectedly falling in with land, can be prepared to anchor in an unusual manner on the instant. Now, about half an hour farther, estimating the ship's rate of progression by the time which had been hitherto consumed, we find the depth to be fifteen fathoms. Here we are told, "that fearing lest they should have fallen upon rocks\*, they cast four anchors out of the stern." This implies that there were rocks to leeward, on which, if they had not anchored, they must have fallen; but the fifteen fathom depth is as nearly as possible a quarter of a mile from the shore, which is here girt with mural precipices, and upon which the sea must have been breaking

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<p>29 Φοβούμενοι τε μήπως εις τραχείς τοπούς εκπεσωσιν, εκ πρυμνης ρίψαντες αγκυρας τεσ- σαρας, ηυχοντο ημεραν γενεσθαι.</p>	<p>29 And fearing lest she should have fallen upon rocks, they cast four anchors out of the stern, and wished for day.</p>
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\* Τραχὺς is mentioned as a hydrographic term by Julius Pollux, and classed with the words δυσορμος, αλιμενος, &c., lib. i. 101. When Ulysses is wrecked on the coast of Phæacia,—

<p>Τοφρα δε μιν μεγα κυμα φερε τρηχειαν επ' ακτην. Ενθα κ' απο ρινους δρυφθη, συν δ' οστε' αραχθη, Ει μη, κ. τ. λ.</p>	<p>Od. V. 425.</p>
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with great violence. Upon the former alarm the ship weathered the point; here it was impossible. From the position of the ship's head, the breakers must have been seen over the lee bow. Their only chance of safety, therefore, was to anchor, but to do so successfully in a gale of wind, on a lee shore, requires not only time for preparation, but holding-ground of extraordinary tenacity. In St. Paul's Bay the anchorage is thus described in the sailing directions: —

“The harbour of St. Paul is open to easterly and north-east winds. It is, notwithstanding, safe for small ships, the ground, generally, being very good; and while the cables hold there is no danger, *as the anchors will never start.*”—P. 161.

The proximate cause of anchoring was no doubt that assigned by St. Luke, namely, the fear of falling on the rocks to leeward; but they had also an ulterior object in view, which was to run the ship ashore as soon as day light enabled them to select a spot where it could be done with a prospect of safety; for this purpose the very best position in which the ship could be, was to be anchored by the stern.

We have no occasion, therefore, to account for this proceeding, by showing that a certain class of vessels in the eastern seas anchor in this manner. To explain away the difficulty, is much the same as if the biographer of Lord Nelson were to explain away the well-known manœuvre of anchoring

by the stern at the battle of the Nile\*, by attempting to prove that this was a common practice with English ships. That of the ancients was the same as the moderns; except under particular circumstances, they anchored by the bow, — “*Anchora de prora jacitur.*” The reasons for doing so are obvious; it is much easier to arrest a ship’s way by the bow than by the stern

It is proper, however, to observe, that from the very necessity of the case the antient navigators were forced to depend much more upon their ground tackle than the moderns. Ships constructed and rigged like theirs could not, when caught in a gale, work off a lee shore, they must of necessity anchor; hence they must have been very amply provided with anchors and cables, and habituated to the use of them in every possible contingency. I may also add, that, as both ends of their ships were alike, there was nothing in their form to prevent this mode of anchoring from being put in practice.

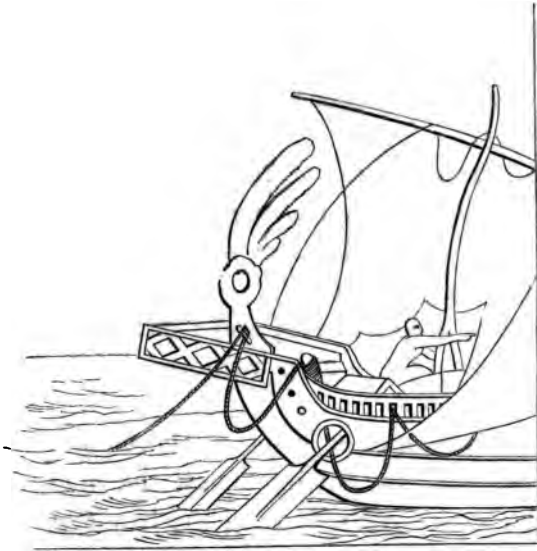
\* Appian ascribes the success of a former naval victory on the coast of Africa to the manœuvre of anchoring by the stern, and for the same reasons as Lord Nelson’s, — it obviated the necessity of exposing the weak points of the ships to the enemy in turning round. The ships of the Carthaginians were anchored along-shore, like the French fleet. The Romans attacked them from the sea, in the usual manner, but in turning round to repeat their blows, they received those of the enemy on their sides, till at last they let go their anchors by the stern, and with a long scope of cable hauled out their ships, *kara πρυμναν*, by the stern. De Bell. Pun., edit. Stephani, p. 76.

There is still one difficulty to be obviated, which I am indebted to a naval friend for starting. Upon pointing out to Captain M'Lean, R. N., whose authority I have already cited, the advantageous position in which it placed the ship for the purpose of running her ashore, he replied — "Very true; but were the ships of the antients fitted to anchor by the stern, had they hause-holes aft? because if they had, we are only coming back to old practices."

This is the difficulty of a seaman, who immediately thinks of how the thing is to be done. I must admit myself too much of a landsman to have thought of it, otherwise I should have been able to have answered it, which I was not at the time; for I had copied from the "*Antichità di Ercolano*," the figure of the ship, in the picture of Theseus deserting Ariadne, which contains details showing, not only that they were so fitted, but the manner in which it was done; and that, too, in a ship so strictly contemporaneous with that of St. Paul, that there is nothing impossible in the supposition, that the artist had taken his subject from that very ship, on loosing from the pier of Puteoli. A hauser is seen towing astern, — it passes through the rudder-port, and within board it is seen coiled round an upright beam or capstan, in front of the break of the poop-deck.

We see, therefore, that ships of the antients were fitted to anchor by the stern, and in the

present instance that mode of anchoring was attended with most important advantages.



If St. Luke had been a seaman, we can scarcely suppose that he would have omitted to have mentioned the reasons for this particular mode of anchoring, or the precautions which were necessary in order to insure its being done with success; but, as usual, he is contented with a bare statement of facts, without assigning reasons or offering explanations. One most essential precaution in such a case, and probably, under the circumstances, a difficult one, was to lift the rudders out of the water, and secure them by lashings; we are not expressly told that this pre-



caution was taken, but we learn afterwards, indirectly, that it was. Perhaps also the main-mast was cut away. Falconer, a seaman, contemplates the possibility of saving the ship by doing so, —

“ The hull dismasted there awhile may ride,  
With lengthened cables on the raging tide.”

*Shipwreck, canto ii.*

The circumstance of the artemon having been hoisted\* when they ran the ship ashore, lends probability to the conjecture, and nothing can be inferred from the author's silence, but it is nothing more than a conjecture; and I have not ventured, in the view of the ship anchored by the stern, to represent it so.

The advantages of being anchored in this manner are, that by cutting away the anchors (*τας αγκυρας περιελοντες*), loosing the bands of the rudders (*ανεντες τας ζευκτηριας των πηδαλιων*), and hoisting the artemon (*επαραντες τον αρτεμονα*), all of which could be, as they were in effect, done simultaneously; the ship was immediately under command, and could be directed with precision to any part of the shore which offered a prospect of safety. Whereas, if anchored in the usual mode, she might have taken “the wrong cast,” or drifted on the rocks before she was under command.

\* In the ship of Catullus, when the mast is cut away, they hoist the artemon, — “*velo prora suo*,” which the scholiast explains “*artemone solo velificaverunt*.” Juv. Sat. xii. 69.— See Dissertation on Ships for proof that the artemon was the foresail.

The number of anchors which were let go shows that the able commander (ναυκληρος) left nothing to chance. The ship is now in a situation where escape is possible, but not certainly one in which it is probable. From the state of the ship, she may go down at her anchors, or the coast to leeward may be iron-bound, affording no beach (αγιαλος) upon which they can land in safety. Hence their anxious longing for day; hence also the ungenerous but natural attempt of the seamen to save their own lives, by taking to the boat; an attempt not peculiar to antient times.\* They lower the boat under pretence of laying out anchors from the bow.† The design is penetrated and defeated by St. Paul. He tells the centurion, that unless they remain in the ship they cannot be saved. The soldiers cut the boat's hawsers, and allow her to go adrift.

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30 Των δε ναυτων ζητουντων  
φυγειν εκ του πλοιου και χαλα-  
σαντων την σκαφην εις την θα-  
λασσην προφασει ως εκ πρωρας  
μελλοντων αγκυρας εκτεινειν,

30 And as the shipmen were  
about to flee out of the ship,  
when they had let down the  
boat into the sea, under colour  
as though they would have cast  
anchors out of the foreship,

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\* When the Athenienne, 64, was lost on the Skerki rocks, near Sicily, in 1806, two boats' crews deserted her. There were no officers in the boats. See United Service Magazine, February, 1845, p. 229.

† We hear of anchors being laid out from both ends of a ship (ἐκατερωθεν). Appian, B. C. 723.

During the interval which remained till day, Paul exhorted them to take food, saying, —

This is the fourteenth day\* that ye have tarried and continued fasting, having taken nothing, wherefore I pray you to take some food, for this is for your health, for there shall not a hair fall from the head of any of you.

31 Εἶπεν ὁ Παῦλος τῇ ἑκατον-  
ταρχῇ καὶ τοῖς στρατιώταις· Ἐάν  
μη οὗτοι μείνωσιν ἐν τῷ πλοίῳ  
ὑμεῖς σωθῆναι οὐ δύνασθε.

32 Τότε οἱ στρατιῶται ἀπε-  
κοψάν τα σχοινία τῆς σκαφῆς, καὶ  
εἰασάν αὐτὴν ἐκπεσεῖν.

33 Ἀχρι δὲ οὐ ἐμελλεν ἡμέρα  
γίνεσθαι, παρεκαλεῖ ὁ Παῦλος  
ἅπαντας μεταλαβεῖν τροφῆς  
λεγών· Τεσσαρεσκαίδεκατὴν  
σημερον ἡμέραν προσδοκῶντες,  
ἀσιτοὶ διατελεῖτε, μὴδὲν προσ  
λαβομένοι.

34 Διὸ παρακαλῶ ὑμᾶς προσ-  
λαβεῖν τροφῆς· τοῦτο γὰρ πρὸς  
τῆς ὑμετέρας σωτηρίας ὑπάρχει·  
οὐδένος γὰρ ὑμῶν θριξὲς ἐκ τῆς  
κεφαλῆς πεσεῖται.

31 Paul said to the centurion  
and to the soldiers, Except these  
abide in the ship ye cannot be  
saved.

32 And the soldiers cut off  
the ropes of the boat, and al-  
lowed her to fall off.

33 And while the day was  
coming on, Paul besought *them*  
all to take meat, saying, This day  
is the fourteenth day that ye  
have tarried and continued  
fasting, having taken nothing.

34 Wherefore I pray you to  
take some meat, for this is for  
your health, for there shall not  
a hair fall from the head of  
any of you.

\* Granville Penn thinks the reading ought to be *τεσσαρας*, καὶ δὲ καὶ σημερον ἡμερων, "four days even this very day;" supposing that the apostle meant that they had literally taken nothing for so many days; but surely there is no difficulty in the case. St. Luke, when he speaks as a historian, terms their fasting "much abstinence" (*πολλῆς ἀστικής*, v. 21.). St. Paul uses the strong, but common, language, of calling taking very little taking nothing. It could not be mistaken by those to whom it was addressed.

They were now to eat in the ship for the last time, and needed no longer to stint themselves to an allowance; the apostle sets the example, and, giving thanks to God, takes a piece of bread, and breaking it, begins to eat; inspirited by it, all of them partake a full meal, the first since the commencement of the gale; and with renewed strength make a last effort to lighten the ship\*, not only by pumping, but by throwing the wheat† into the sea.

35 Εἰπὼν δὲ ταῦτα, καὶ λαβὼν ἄρτον, εὐχαρίστησε τῷ Θεῷ, ἐνώπιον πάντων, καὶ κλάσας ἤρξατο ἐσθίειν.

35 And when he had thus spoken, he took bread, and gave thanks to God, in presence of them all, and when he had broken it, he began to eat.

36 Εὐθυμοὶ δὲ γενομένοι πάντες, καὶ αὐτοὶ προσελαβόντο τροφῆς.

36 Then were they all of good cheer, and they also took some meat.

37 Ἡμεν δὲ ἐν τῇ πλοίῳ αἱ πᾶσαι ψυχαὶ διακοσμία ἐξδομήκοντα ἕξ.

37 And we were in all in the ship two hundred three score and sixteen souls.

38 Κορεσθέντες δὲ τροφῆς, ἐκουφίζον τὸ πλοῖον, ἐκβάλλομενοι τὸν σίτον εἰς τὴν θάλασσαν.

38 And when they had eaten enough, they lightened the ship, and cast out the wheat into the sea.

\* *Εκουφίζον τὸ πλοῖον*, they lighten the ship. Amongst the nautical terms of Julius Pollux we find *κουφίσαι τὴν ναῦν*. (See note to verse 18.) The Septuagint has *κουφίσθηναι*, Jonah, i. 5.

† Some suppose that by *τὸν σίτον* the remainder of the ship's provisions is meant; but to suppose that they had remaining such a quantity as would lighten the ship is quite inconsistent with the previous abstinence; and, besides, wheat was the staple commodity imported from Alexandria to Italy.

When day broke they did not know the land\*; but it had certain peculiarities, and unless we can show that the shore to the west of the ship's supposed position possesses the same peculiarities, it will not agree with that mentioned in the text. The first of these is, "rocky places," (τραχεις τοπους); the fear of falling upon which at night had caused them to come to anchor. Now the shore here is skirted with precipices, against which the ship must have been dashed in pieces, had she not been anchored. The next is, a "creek with a sandy beach" (κολπον εχοντα αιγιαλον)†; and the third is, "a place

\* It has been asked, if Malta was the island, how came it not to be known to some of the crew, for it is not to be supposed that Alexandrian seamen could be ignorant of that island? Major Rennel, with his usual candour, says: "It must be admitted, that, on a supposition that it was the island of Malta (as the author certainly concludes), it might appear extraordinary that it should not have been recognised by some of the crew of the ship, which belonged to Alexandria (chap. xxvii.), as it may be supposed that Malta was well known to the navigators of that port. This, however, I cannot pretend to account for."—*Archæologia*, xxi. 103. But St. Paul's Bay is remote from the great harbour, and possesses no marked features by which it could be recognised.

† "A creek with a shore." Commentators tell us that every creek has a shore, and that it should be "a shore with a creek," vide Kuinoel ad loc. ; but αιγιαλος, although it sometimes means the shore in general, in a restricted sense means a sandy beach, in contradistinction to a rocky coast. St. Luke here uses the correct hydrographical term. Arrian uses it frequently in this sense. Thus, in describing the shores of the Red Sea, he talks of a great and small beach, αιγιαλος και μικρος και μεγας, Perip. Mar. Eryth. p. 9. ; and in the Periplus of Nearchus, we are told

of two seas" (τοπον διθαλασσον). It will be seen how perfectly these features still distinguish the coast.

Having observed from the ship a creek, such as we have described, they determined, if it were possible, to thrust the ship into it; they now cut their cables\*, and left the anchors in the sea; and loosing (ανευντες) the lashings of the rudders†, and hoist-

39 Ὅτε δὲ ἡμέρα ἐγένετο, τὴν γῆν οὐκ ἐπεγινώσκον· κολπον δὲ τινα κατενοοῦν ἔχοντα αἰγιαλον, εἰς ὃν ἐβουλεύσαντο, εἰ δυναιντο, ἐξῶσαι τὸ πλοιον.

40 Καὶ τὰς ἀγκυρας περιέ-  
λοντες εἰων εἰς τὴν θαλάσσαν,  
ἀμα ἀνευντες τὰς ζευκτηρίας τῶν  
πηδαλιῶν· καὶ ἐπάραντες τὸν  
αρτεμονα τῇ πνεύσει κατεῖχον  
εἰς τὸν αἰγιαλον.

39 And when it was day they knew not the land, but they discovered a certain creek with a shore, into the which they were minded, if it were possible, to thrust in the ship.

40 And when they had cut the anchors, they left them in the sea (marginal translation), and loosed the rudder bands, and hoised up the mainsail to the wind, and made towards shore.

that the fleet was moved from one sandy beach to another, which was named Neoptana. Ἀλλὰ ἐπλεον γὰρ ἀπο τοῦ αἰγιαλοῦ, ἀραντες, τῇ γῇ προσεχέες, καὶ πλεύσαντες σταδίους ὡς ἑπτακοσίους ἐν ἀλλῷ αἰγιαλῷ ὥρμισαντο. Νεοπτανα ὀνοματῇ αἰγιαλῷ.—p. 23.

\* The marginal translation in our version is certainly the correct one, literally cutting off the anchors and leaving them in the sea.

† Antient ships were steered by two large paddles, one on each quarter. When anchored by the stern in a gale, it would be necessary to lift them out of the water and secure them by lashings or rudder bands, and to loose the rudder bands when the ship was again got under way.

ing up the artemon\*, or foresail (*αρτεμουνα*), they made for the creek, which they had previously selected for the purpose.

The ship must have been driven to the west side of the bay, which is rocky, but has two creeks. One of these, Mestara Valley, has a shore. (See chart.) I am, however, inclined to think that the point of appulse was in the creek, which has no longer a sandy beach, but which must have had one formerly, although now worn away by the wasting action of the sea; it is near the spot marked in the chart of St. Paul's Bay, as the traditional scene of the wreck. My chief reason for supposing that it was hereabouts that the ship was run ashore is its proximity to what St. Luke calls "a place of two seas" (*τοπον διθαλασσον*)†, or, as our authorised version renders it by a happy conjecture, "a place where two seas meet." From the entrance of the bay, where the ship must have been anchored, they could not possibly have suspected that

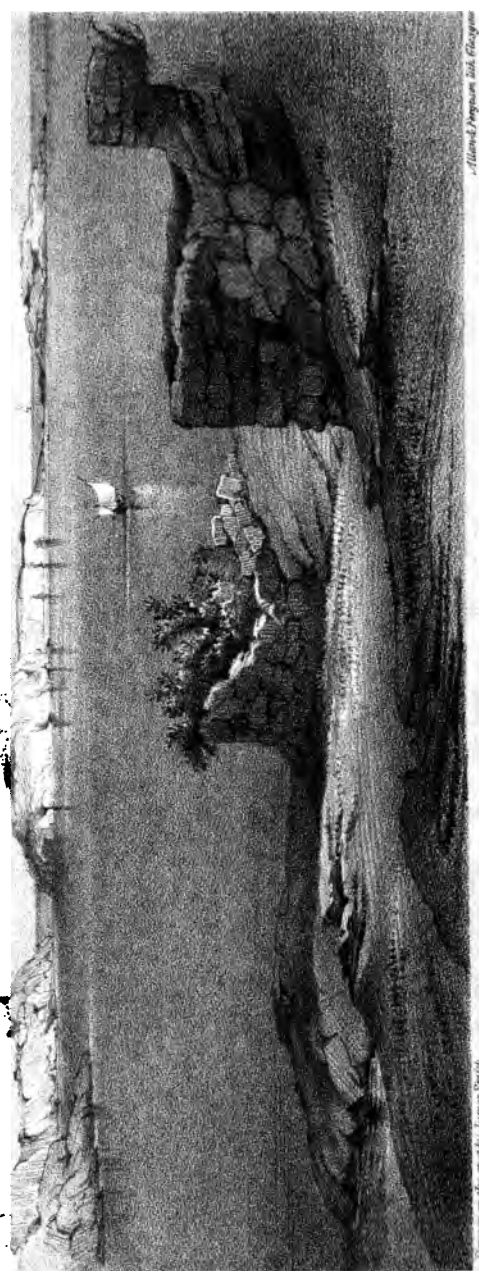
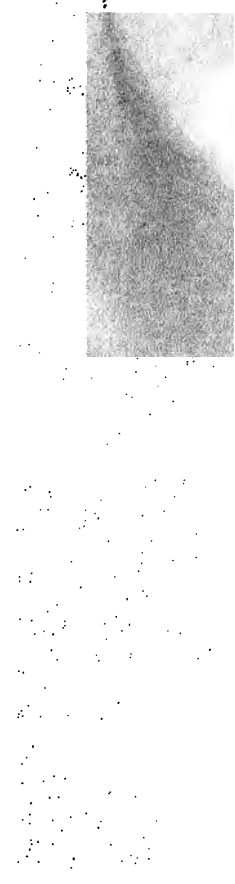
\* The Artemon was certainly the foresail, not the mainsail. See Dissertation on antient Ships; see also frontispiece. A sailor will at once see that the foresail was the best possible sail that could be set under the circumstances.

† *Εἰς τοπον διθαλασσον*, in locum bimarem. It is generally supposed to mean an isthmus, which is no doubt dithalassic; but the interposition of land between the two seas is not necessary. Strabo calls the Bosphorus dithalassic, — *Πελαγος ὁ καλουσι Προποντιδα· κακειθεν εἰς αλλο το Ευξεινον προσαγορευομενον ποντον, εστι δε διθαλαττος τροπον τινα ουτος*.— Lib. ii. cap. 5. The narrow sound between the island and the main is a Bosphorus in miniature.









*Alfred Thompson del. Glasgow*

*Drawn on the spot by James Smith*

ST. PETER BAY MAHER FROM THE SOUTH.



at the bottom of it there should be a communication with the sea outside ; this unexpected circumstance naturally attracted the attention of the author, and served to mark the spot where the ship was wrecked. Selmoon Island, which separates the bay from the sea on the outside, is formed by a long rocky ridge, separated from the main land by a channel of not more than a hundred yards in breadth.

Near this channel, which a glance at the chart will show must be where a ship from the eastward would be driven, they ran the ship ashore (επωκειλαν την ναυν)\*; the fore part stuck fast (ερεισασα), and remained entire, but the stern was dashed to pieces by the force of the waves. This is a remarkable circumstance, which, but for the peculiar nature of the bottom of St. Paul's Bay, it would be difficult to account for.

The rocks of Malta disintegrate into extremely minute particles of sand and clay, which, when acted upon by the currents, or surface agitation,

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41 Περιπεσοντες δε εις τοπον  
διθαλασσον, επωκειλαν την ναυν.  
και η μεν πωρα ερεισασα εμεινεν  
ασαλευτος, η δε πρυμνα ελνετο  
υπο της βιας των κυματων.

41 And falling into a place  
where two seas met, they ran  
the ship aground, and the fore-  
part stuck fast, and remained  
unmoveable, but the hinder  
part was broken with the force  
of the waves.

---

\* Julius Pollux has ωκειλεν η ναυς, προσώκειλεν, εξώκειλεν. The word is used in the same sense as in the text by Arrian, Xenophon, Polybius, &c.

form a deposit of tenacious clay ; but, in still water, where these causes do not act, mud is formed ; but it is only in the creeks where there are no currents, and at such a depth as to be undisturbed by the waves, that the mud occurs. In Captain Smyth's chart of the bay the nearest soundings to the mud indicate a depth of about three fathoms, which is about what a large ship would draw. A ship, therefore, impelled by the force of a gale, into a creek with a bottom such as that laid down in the chart, would strike a bottom of mud, graduating into tenacious clay, into which the fore part would fix itself, and be held fast, whilst the stern was exposed to the force of the waves.

The ship has now reached the shore ; but, before relating the escape of the passengers and crew, I shall endeavour to give the reader some idea of what must have been their privations and sufferings, and supply what is wanting in St. Luke's account, or merely hinted at, by citing examples of ships circumstanced as theirs was. I take the outline from the antient voyage, and fill up the details with "modern instances," limiting myself to two cases, that of a crazy ship, undergirded, and struggling with a gale, namely, Captain Back's ; the other of a ship caught in a typhoon, namely the India Company's ship *Bridgewater*.\*

\* From the United Service Magazine, 1831, part 2. p. 49. The ship encountered the typhoon, 4th March, 1829.

I have already shown that the inevitable result of such a storm must have been to have strained the hull severely, and rendered the ship leaky to an alarming degree; and that the knowledge of this fact, which we only arrive at by inference, gives us a key which explains all the subsequent incidental notices which drop from the author. Such was the case both with the *Terror* and the *Bridgewater*. The leaks in the former ship were partly, no doubt, caused by the ice; in the latter case they were the effects of a typhonic gale. The officer who describes it says, they "found the ship had suffered severely in the hull." After undergirding *St. Paul's* ship, —

Ver. 17. "They lowered the gear."

"Got our top-gallant masts and yards on deck." — *Bridgewater*,

Ver. 18. "Exceedingly tossed by a tempest."

"The unabated fury of the gale, strengthened by squalls, raised a long, breaking sea, in which she plunged so heavily, that it was often unusually long before she recovered herself. It was evident she was getting more water-logged, and the straining and creaking of her whole frame, the working of the bulk-heads, which actually raised the officers' bed places, the rickety twisting occasioned by the fore and aft motion, and the prolonged dull roll to windward, to say nothing of the cascade-like rushing of the water within; all these were certain indications of a consummation which no exertions of ours would probably be sufficiently long to defer." — *Voyage of Terror*, p. 438.

"Next day they lightened the ship."

"It was determined that the guns should be thrown over-board, as well as part of the cargo." — *Bridgewater*.

Ver. 19. "Cast out . . . the tackling of the ship."

"Cut away the sheet and stream anchors." — *Bridgewater*.

Ver. 20. "All hope that we should be saved was then taken away."

"I was acquainted shortly after midnight by Lieutenant Smyth, that the crew were no longer equal to the task of keeping the leaks under, and that, consequently, we were sinking." — *Terror*, p. 439.

"I confess that all hope of ultimate preservation entirely left me." — *Bridgewater*.

Ver. 21. "After long abstinence."

"To aggravate our disasters, the ship too laboured so as to make it impossible to light a fire, and thus deprived us of the nourishment essential to the restoration of our exhausted energies." — *Terror*, p. 440.

"With the exception of a biscuit and a glass of spirits occasionally, not a man in the ship had throughout three days either sustenance or sleep. Owing to this, together with the great exertions required of them at the pumps, they had become completely exhausted and dispirited." — *Bridgewater*.

Ver. 29. "They anchor the ship."

"Near midnight anchored safely in Loch Swilly." — *Terror*, p. 441.

Ver. 39. "They discovered a certain creek with a shore (beach), into which they were minded, if it were possible, to thrust in the ship."

"Finding that their united efforts were unable to keep her afloat, it was determined to run her ashore on a small sandy beach, selected for the purpose." — *Terror*, p. 442.

I offer these extracts, not as curious coincidences, but that the reader may see from parallel cases what was the state of their ship, and the cause of their running her ashore.

They have now escaped the dangers of the sea, but other dangers await them; the guard, in conformity with the stern behests of Roman law, proposed to kill the prisoners, in order to prevent their escape. "But the centurion, willing to save Paul, kept them from their purpose; and commanded that they which could swim should cast themselves first into the sea, and get to land. And the rest, some on boards, and some on broken pieces of the ship, and so it came to pass that they escaped all safe to land."

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42 Των δε στρατιωτων βουλη  
εγενετο, ινα τους δεσμωτας απο-  
κτεινωσι, μη τις εκκολυμεισας  
διαφυγοι.

43 'Ο δε εκατονταρχος, βουλο-  
μενος διασωσαι τον Παυλον, εκω-  
λυσεν αυτους του βουληματος,  
εκελευσε τε τους δυναμενονς  
κολυμβειν, απορριψαντας πρωτους  
επι την γην εξιεναι.

44 Και τους λοιπους, ους μεν  
επι σανισιν, ους δε επι τινων των  
απο του πλοιου· και ούτως εγε-  
νετο παντας διασωθηναι επι την  
γην.

42 And the soldiers' council  
was to kill the prisoners, lest  
any of them should swim out  
and escape.

43 But the centurion, wil-  
ling to save Paul, kept them  
from *their* purpose, and com-  
manded that they which could  
swim should cast *themselves*  
first into the sea, and get to  
land.

44 And the rest, some on  
boards, and some on *broken*  
*pieces* of the ship. And so it  
came to pass that they escaped  
all safe to land.



## CHAP. V.

## MELITA TO ITALY.

(Chap. xxviii. 1.)

AFTER reaching the shore, they learnt, for the first time, that the name of the island was Melita. Their previous ignorance of this has been adduced, as an argument\* that this could not be a place so well known as the African Melita, now Malta. Major Rennel, with his usual candour, states the difficulty, and admits that he cannot remove it. This circumstance, however, will not be felt as a difficulty by any one acquainted with the locality; the sailors were, probably, little acquainted with any part of the island, except the great harbour (of Valetta), and the coast near it—the scene of the shipwreck lies remote from it, and it is out of the usual track of ships approaching the harbour; and there is no marked feature in the configuration of the land which could make it known even to a native, if he came unexpectedly upon it.†

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1. Και διασωθεντες, τότε επ-  
εγνωσαν ότι Μελιτη ή νησος κα-  
λειται.

1. And when they were es-  
caped, then they knew that the  
island was called Melita.

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\* Georgi, p. 191. See note at p. 100.

† Captain Smyth makes use of the buildings, Selmoon palace and the university tower, as land-marks.

The natives \* received the unfortunate voyagers with kindness, and kindled a fire, because of the rain, and because of the cold.

These meteorological remarks prove that the wind was to the north of east, for if it had been a Scirocco wind (S.E.), as Bryant and others contend it would have been hot and sultry, for such is the character of that wind in the Mediterranean even so late as the month of November. I may add, that the scirocco seldom or ever lasts more than three days.†

A circumstance now occurs which has given rise to much discussion :—

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2. Οἱ δὲ βαρβαροὶ παρήχον  
οὐ τὴν τυχοῦσαν φιλάνθρωπιαν  
ἡμῖν· ἀναψάντες γὰρ πυρὰν,  
προσελαβόντο πάντας ἡμᾶς διὰ  
τὸν ὕετον τὸν ἐφεστώτα, καὶ διὰ  
τὸ ψυχρὸς.

2. And the barbarous people  
shewed us no little kindness,  
for they kindled a fire, and re-  
ceived us every one, because  
of the incessant rain, and be-  
cause of the cold.

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\* In the Dissertation on the Island of Melita, I have answered the arguments of Bryant, founded on the term *βαρβαροὶ*, applied by St. Luke to the natives.

† Gales, in other directions, are of much longer continuance. Mr. Greswell cites a case which agrees in a remarkable manner with that of St Paul. Aristides (the orator) encounters a gale in the Ægean Sea, and is driven through it for fourteen days and nights. *Τετταρες παλιν αὐταὶ πρὸς ταῖς δέκα ἡμέραι καὶ νυκτεὶς χεῖμωνος κυκλῶ δια παντός τοῦ πελαγούς φερομένων.*— Dissertations, vol. iv. p. 197.

“ When Paul had gathered a bundle of sticks, and laid them on the fire, there came a viper out of the heat and fastened on his hand ; and when the natives saw the venomous beast hang upon his hand, they said among themselves, no doubt this man is a murderer, whom, though he hath escaped the sea, yet vengeance suffereth not to live. He, however, shook off the beast into the fire, and felt no harm. But they expected that he would have swollen, or fallen down dead suddenly ; but after they had looked a great while, and saw no harm come to him, they changed their minds and said he was a God.”

The difficulty here is, that although there are serpents in Malta, they are not venomous, as the

3. Συντρεψαντος δε τον Παυλον φρυγανων πληθος, και επιθεντος επι την πυραν, εχιδνα εκ της θερμης εξελθουσα καθηψε της χειρος αυτου.

4. Ὡς δε ειδον οἱ βαρβαροι κρεμαμενον το θηριον εκ της χειρος αυτου ελεγον προς αλληλους· Παντως φονευς εστιν ὁ ανθρωπος οὗτος, ὃν διασωθεντα εκ της θαλασσης ἡ δικη ζην ουκ ειασεν.

5. Ὁ μὲν οὖν αποτιναξας το θηριον εις το πυρ, επαθεν ουδεν κακον.

6. Οἱ δὲ προσεδокων αυτον μελλειν πιμπρασθαι, η καταπιπτειν αφνω νεκρον. Επι πολυ δε αυτων προσδοκωντων και θεωρουντων μηδεν ατοπον εις αυτον γινομενον, μεταβαλλομενοι ελεγον Θεον αυτον ειναι.

3. And when Paul had gathered a bundle of sticks, and laid them on the fire, there came a viper out of the heat and fastened on his hand.

4. And when the barbarous people saw the *venomous* beast hang upon his hand, they said among themselves, No doubt this man is a murderer, whom, though he hath escaped the sea, yet vengeance suffereth not to live.

5. And he shook off the beast into the fire, and felt no harm.

6. Howbeit, they looked when he should have swollen, or fallen down dead suddenly : but after they had looked a great while, and saw no harm come to him, they changed their minds, and said he was a God.

term *εχίδνα* (viper) implies. Upon this point I would merely observe that no person who has studied the changes which the operations of man have produced on the Fauna (animals) of any country, will be surprised that a particular species of reptiles should have disappeared from that of Malta. My friend, the Rev. Mr. Landsborough, in his interesting excursions in Arran, has repeatedly noticed the gradual disappearance of the viper from that island since it has become more frequented.

Mr. Lyell, in quoting the travels of Spix and Martius in Brazil, observes,—

“They speak of the dangers to which they were exposed from the jaguar, the *poisonous serpents*, crocodiles, scorpions, centipedes, and spiders. But with the increasing population and cultivation of the country, say these naturalists, these evils will gradually diminish; when the inhabitants have cut down the woods, drained the marshes, made roads in all directions, and founded villages and towns, man will by degrees triumph over the rank vegetation and the noxious animals.” \*

Perhaps there is no where a surface of equal extent in so artificial a state as that of Malta is, at the present day, and no where has the aboriginal forest been more completely cleared; but it by no means follows that this was the case when St.

\* Principles of Geology, seventh edition, p.655. The evidence of Pliny has been adduced to show, that when he wrote there were no noxious animals in the African islands. The passage is as follows: “Mox Gaulos (Gozo) et Galata cujus terra scorpionem dirum animal Africæ necat.” — Lib. v. c. 7. Answer: Melita is not mentioned; scorpions are not vipers; there are scorpions both in Gozo and Malta.

Luke wrote. Indeed we have proof that it was not, for the narrative informs us that the animal come out of a bundle of sticks which St. Paul had gathered. We need not, therefore, be surprised that with the disappearance of the woods, the noxious reptiles which infested them should also have disappeared.

We are now told, that "In the same quarters were the possessions of the chief man of the island, whose name was Publius, who received us and lodged us three days courteously."

The term *πρωτος της νησου*, "the chief or first of the island," may mean either that Publius was the principal person in the island, as our translators have understood it, or it may be an official title. There are several reasons for supposing that it is in the latter sense that St. Luke uses it. The word in the plural *οι πρωτοι* is elsewhere appropriately used to designate the principal men of a place, Mar. vi. 21. ; Acts, xiii. 50. xxviii. 17. ; but it is no where in the New Testament used in this sense in the singular, and it is difficult to suppose that in a populous island there was any one who, independently of official rank, was so prominent as to

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7. Εν δε τοις περι τον τοπον  
εκεινον υπηρχε χωρια τῷ πρωτῷ  
της νησου, ονοματι Ποπλιϋ, ὃς  
αναδεξαμενος ἡμας, τρεις ἡμερας  
φιλοφρονως εξενισεν.

7. In the same quarters were  
possessions of the chief man of  
the island, whose name was  
Publius, who received us and  
lodged us three days courte-  
ously.

be mentioned, by his position, even in preference to his name. It is also to be observed, that the father of Publius was alive, and it is unlikely that, except by official rank, the son should have been so emphatically styled the chief man of the island in his life-time.

But we have nearly conclusive proof that *πρωτος* was an official designation, in two inscriptions, one in Greek and the other in Latin, still, or lately\*, in

\* These interesting and important inscriptions were certainly seen and carefully copied by Ciantar, from whose work I give the Greek inscription, as being probably the most correct copy. He says, — “Questo marmo si trova oggi posto alla pila d'un fonte che scaturisce nel fosso sotto la mura e alla porta della Citta Notabile (Citta Vecchia).” — T. i. p. 515. The inscription is as follows : —

A . K . . . ΚΙΟΣ ΚΥΡ ΠΡΟΥΔΙΝΣ ΙΠΠΕΤΣ ΡΩΜ ΠΡΩΤΟΣ ΜΕΛΙΤΑΙΩΝ  
ΚΑΙ ΠΑΤΡΩΝ ΑΡΧΑΣ ΚΑΙ ΑΜΦΙΠΟΛΕΤΣ Α Σ ΘΕΩ ΑΤΤΟΤ  
..... ΣΤΩ . . . ΕΣΧ . . . Ν . . Ε . . Ι . . ΝΕ

which has been restored conjecturally thus, —

Α(υλος) Κ(αστρι)κιος Κυρ Προυδινς ιππευς Ῥωμ Πρωτος Μελιταιων  
και Πατρων αρχας και αμφιπολευς Α(υγουστω) Σ(εβαστω) Θεω  
αυτου (Σέβα)στω . . κ.τ.λ.

It is supposed to form a votive inscription by a Roman knight, named Aulus Castricius, chief of the Melitans (*Πρωτος Μελιταιων*), to the emperor. The Latin inscription was discovered at Citta Vecchia, in excavating the foundation of the Casa del Magistrato, in 1747 ; it is inscribed on the pedestal of a column, and is said by Ciantar to be preserved in the hall of that building.

I was unable to find either of these inscriptions : it is to be hoped that they will be brought to light, and preserved in the valuable collection of Maltese antiquities, in the Knights' Library.

Malta. In the former, a certain Roman knight, A. K . . . *κιος*, is styled by the same title as Publius, chief of the Melitans (*Πρωτος Μελιταιων*), and in the Latin inscription subsequently discovered, the same title occurs, MEL. PRIMUS.

I conclude, therefore, that *πρωτος* here is an official title.\*

We come now to the miraculous cure of the father of Publius. His disease is mentioned in the accurate and professional language which distinguishes the writings of St. Luke; it is stated that he lay, seized with, or labouring under, (*συνεχόμενον*)†, fevers and dysentery (*πυρετοῖς καὶ δυσεντερίᾳ*).

“To whom Paul entered in and prayed, and laid his hands on him and healed him. So when this was done, others also which had diseases in the island came and were healed.”

8. Εγενετο δε τον πατερα του Ποπλιου πυρετοις και δυσεντερια συνεχομενον κατακεισθαι προς ον ο Παυλος εισελθων, και προσευξαμενος, επιθεις τας χειρας αυτω ιασατο αυτον.

8. And it came to pass, that the father of Publius lay sick of a fever and of a bloody flux : to whom Paul entered in, and prayed, and laid his hands upon him, and healed him.

\* Schaeffer, in his “Dissertatio de Publico *Πρωτω* Meliten-sium” (4to, Jena, 1755), arrives at the same conclusion. His labour, however, is chiefly bestowed upon the attempt to prove that Publius was of a Roman family.

† “In speaking of Simon’s wife’s mother, who was taken with a great fever, he uses the term *συνεχομενη* in the same sense that the Greek (medical) writers do.” *Walker* “on the Medical Language of St. Luke.” *Gent. Mag.* June, 1841. And

Here we have the evidence of a medical man distinguished for his caution, upon a point upon which he could not be mistaken, and where he was an eye witness.

But this was not the only miraculous cure wrought by the apostle; for "others, also, which had diseases in the island came and were healed, who also honoured us with many honours, and when we departed, they loaded us with such things as were necessary.

"And after three months we departed in a ship of Alexandria, which had wintered in the isle, whose sign was Castor and Pollux.

"And landing at Syracuse, we tarried there three days."

9. Τούτου οὖν γενομένου, καὶ οἱ λοιποὶ οἱ ἔχοντες ἀσθενείας ἐν τῇ νήσῳ προσήρχοντο, καὶ ἐθεραπεύοντο.

10. Οἱ καὶ πολλαῖς τιμαῖς ἐτίμησαν ἡμᾶς, καὶ ἀναγομένοις ἐπέθεντο τὰ πρὸς τὴν χρείαν.

11. Μετὰ δὲ τρεῖς μῆνας ἀνηχθήμεν ἐν πλοίῳ παρακεχειμακοτι ἐν τῇ νήσῳ, Ἀλεξάνδρινῳ, παρασημῷ Διοσκουροῖς.

12. Καὶ καταχθέντες εἰς Συρακούσας, ἐπεμείναμεν ἡμέρας τρεῖς.

9. So when this was done, others also, which had diseases in the island, came and were healed:

10. Who also honoured us with many honours; and when we departed they laded us with such things as were necessary.

11. And after three months, we departed in a ship of Alexandria, which had wintered in the isle, whose sign was Castor and Pollux.

12. And, landing at Syracuse, we tarried there three days.

Hippocrates uses the term *πυρετοὶ* (fevers) in the plural.—Epid. iii.



After leaving this port, which is not more than a day's sail from Melita, they proceeded circuitously (*περιελθόντες*), towards Rhegium. The meaning of the expression is not very clear. I am inclined to suppose that the wind was north-west, and that they worked to windward, availing themselves of the sinuosities of the coast; but with this wind they could not proceed through the Straits of Messina, from the tendency which the wind always has to blow parallel to the direction of narrow channels; they were, therefore, obliged to put into Rhegium, at the entrance of the strait. But after one day the wind became fair (from the south), and on the following they arrived at Puteoli, having accomplished a distance of about 180 nautical miles in less than two days.\*

Puteoli was then, as it is now, the most sheltered part of the Bay of Naples. It was the principal port of southern Italy, and, in particular, it was the great emporium for the Alexandrian wheat ships. Seneca, in one of his epistles, gives an interesting and graphic account of the arrival of

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13. Ὅθεν περιελθόντες κατηντήσαμεν εἰς Ῥηγίον· καὶ μετὰ μιαν ἡμέραν ἐπιγενομένου νοτοῦ, δευτέραισι ἤλθομεν εἰς Ποτιόλους.

13. And from thence we fetched a compass, and came to Rhegium; and after one day the south wind blew, and we came the next day to Puteoli.

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\* See Remarks on the Rate of Sailing of Ancient Ships, in the Dissertation on the Ships, &c. of the Ancients.

the Alexandrian fleet.\* All ships entering the bay were obliged to strike their topsails (*suppara*), except wheat ships, which were allowed to carry theirs. They could, therefore, be distinguished whenever they hove in sight. It was the practice to send forward fast-sailing vessels (*tabellariæ*), to announce the speedy arrival of the fleet; and the circumstance of their carrying topsails, made them distinguishable in a crowd of vessels. The *supparum*, therefore, was the distinguishing signal of the Alexandrian ships.

The farther proceedings of the apostle, till his arrival at Rome, I give in the words of our authorized translation. At Puteoli, St. Luke says, (v. 14.)

“ We found brethren, and were desired to tarry with them seven days; and so we went towards Rome; and from thence, when the brethren heard of us, they came to meet us as far as Appii Forum, and the three taverns, whom, when Paul saw,

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\* “*Subito, nobis hodie Alexandrinæ naves apparuerunt, quæ præmitti solent et nuntiare secuturæ classis adventum. Tabellarias vocant. Gratus illarum adspectus Campaniæ est. Omnis in pilis Puteolorum turba consistit, et ex ipso genere velorum, Alexandrinas quamvis in magna turba navium intelligit, solis enim licet supparum intendere quod in alto omnes habent naves. Nulla enim res æque adjuvat cursum, quam summa pars veli, illinc maxime navis urgetur. Itaque quoties ventus increbuit majorque est quam expedit, antenna submittitur, minus habet virium flatus ex humili; cum intrare Capreas et promontorium ex quo*

*Alta procellos speculatur vertice Pallas — cæteræ velo jubentur esse contentæ, supparum Alexandrinarum insigne est.” — Epist. 77.*

he thanked God and took courage. And when we came to Rome, the centurion delivered the prisoners to the captain of the guard, but Paul was suffered to dwell by himself, with a soldier that kept him."

We learn, in the thirtieth verse, that St. Paul hired a house, and dwelt in it for at least two years. During this period, St. Luke wrote the Acts of the Apostles. This must have been in the third year of the governorship of Festus, the Roman procurator of Judea, an important date, for it establishes the still earlier date of his gospel.

That work, in its turn, proves the previous existence of written accounts of the transactions of our Saviour, by eye-witnesses and ministers of the word.\*

\* See Dissertation of the Sources of the Gospel of St. Luke.

## DISSERTATION I.

## ON THE WIND EUROCLYDON.

BRYANT, in his dissertation on the wind Euroclydon, contends for the common reading of the word, in opposition to Dr. Bentley, who defends the reading Euro-aquilo on etymological grounds, considering it to be a compound of Eurus and Aquilo, taking Eurus as Gellius and the Latin poets use it for the middle equinoctial east, and Aquilo as north-east; hence the intermediate point between these two winds is E.N.E., which Dr. Bentley considers to be the true direction of the wind.\*

Bryant thus meets his argument:—

“ The learned writer whose opinion I am controverting takes uncommon pains to remove Eurus from the point where it is ever stationed, in order to compound it with a wind that it is really incompatible with. And how does he effect it? by means the most extraordinary; no less than by making Gellius and the Latin poets, whose authority he does not produce, the best judges to determine the establishment of the Greek winds, *in contradiction to the Greeks themselves*. All which labour is undertaken to introduce a reading as new and uncommon as that which he repudiates. And, in making use of Roman authority, he confessedly sets aside the evidence of the best and most respectable writers; and founds his opinion on the report

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\* See Dr. Bentley's observations on this subject, extracted from “Remarks on a late Discourse on Free Thinking,” — Appendix, No. 2.

of a single person, who will at the last turn out a confused and second-hand voucher. But let us attend to his words, — ‘ ’Tis true, according to Vitruvius, Seneca, Pliny (he might have added Varro, Columella, — and of the Greeks, who were the best judges, — Aristotle, Timosthenes, Bio, Posedonius, Strabo, &c.), according to the opinion of these there could be no such wind or word as Euro-aquilo; but Eurus is here taken, as the Latin poets use it, for the middle equinoctial east.’ As to the poets, he does not produce their evidence, nor is it worth producing; they write always so indeterminately, and with such a latitude. The whole of the argument, then, rests upon Gellius: let us turn to him, and see what he says. He tells us nothing of himself, but only *Favorinus ita fabulatus est*, — being at dinner with one Favorinus, that person discoursed at large about the winds, and ran counter to the best writers that preceded him. Among other things that he determined, was the place of the wind Eurus, which, as far as we can understand him, he would fain remove from the eastern winter solstice, and make it the same as the *Solanus* and *Αφελιωτης*, that is, in place of the south-east, he would place it in the eastern *equinoctial point*. But this *Favorinus* is not of sufficient consequence to be *opposed singly* to the group of illustrious writers before mentioned. He was a sophist, and does not, in the present affair, acquit himself with proper precision. The words of his commentator upon this very passage will give one a just idea what his authority merits: ‘*Intricate hic loquiter Favorinus, et dubito an seipsum intellexerit; vel per Eurum Euronotum, sive Voltur-num denotaverit. Sed quid commune Volturmo cum Aquilone,*’ &c. Thus all this laboured evidence vanishes in smoke; and it is the real opinion of his scholiast that the sophist did not understand himself any more than he is understood of others. So much for *Favorinus fabulator*.”

I have given Bryant’s answer to Bentley at full length; his argument, if argument it can be called, is, first, that Bentley uses *Latin* authorities to over-set the *invariable practice of Greek writers*. Bentley mentions the *Latin* poets and Aulus Gellius.

Bryant evades the argument drawn from the meaning attached to the word by the poets, by observing, that Bentley "does not produce his authorities;" but this is a task which any school-boy, who had read Virgil or Ovid\* would be competent to perform. He confines himself to discuss the evidence of Gellius, which it seems is brought forward to remove "Eurus from the point where it is *ever* stationed \* \* \* and in the place of the *south-east* he would place it in the eastern equinoctial point."

It is difficult to understand how any person who has read the *Noctes Atticæ* of Aulus Gellius could argue thus; for the authority brought forward by that writer is, in fact, that of the celebrated *Greek* philosopher Favorinus†, who is the

\* "Confligunt Zephyrusque Notusque, et lætus Eois  
Eurus equis." — *Æn.* ii. 417.

"Eurus ad Auroram, Nabathæaque regna recessit,  
Persidaque, et radiis juga subdita matutinis.  
Vesper, et occiduo quæ littora sole tepescunt,  
Proxima sunt Zephyro; Scythiam septemque trionem  
Horrifer invasit Boreas; contraria tellus  
Nubibus assiduis, pluvioque madescit ab Austro."

OVID. *Met.* i. 61.

"Nam modo purpureo vires capit Eurus ab ortu,  
Nunc Zephyrus sero vespere missus adest,  
Nunc gelidus sicca Boreas bacchatur ab Arcto,  
Nunc Notus adversa prælia fronte gerit."

*Amor.* lib. ii. eleg. xi.

† Favorinus is the philosopher who allowed himself to be overcome in argument by the Emperor Adrian, excusing him-

principal personage of the Noctes. Let us enquire into the *invariable* practice of the Greeks. I admit that some Greek authorities did place Eurys in the south-east, others at the point of the horizon where the sun rises at the winter solstice; but it is quite easy to show that this was anything but the *invariable* practice of Greek writers. In point of fact it is rather the exception than the rule.

Homer places Eurys in the eastern cardinal point.\* Strabo quotes Homer as an authority, and adds that "he keeps the proper order" (*φυλαττει την οικειαν ταξιν*, *L. G. i. c. 2.*). Strabo also makes it the opposite to west, speaking of a ship "sailing from west to east," he says, *απο της δυσσεως Ευρωπλεων*, (*lib. ii. c. 3.*) Aristotle says it is the

self by saying — "Would you have me pretend to be wiser than the master of thirty legions?"

Lucian mentions him by name in "Damonax;" and alludes to him in "Eunuchus," in a way that cannot be mistaken, as "celebrated amongst the *Greeks*." *Ακαδημαϊκος Ευνουχος εκ Κελτων ολιγον προ ημων ευδοκιμησας εν τοις Έλληνεσιν*. Philostratus quotes him as a *Greek* authority, (*lib. iv. c. viii.*); he is also quoted by Diog. Laert. as a *Greek* author; Gellius repeatedly mentions him as thinking, speaking, and writing in *Greek*. See *lib. xvi. c. iii.*; *lib. xiii. c. xxiv.*; *xiv. c. i.*, &c. "So much for Favorinus Fabulator," as Bryant says.

\* *Συν δ' Ευρος τε Νοτος τ' επεσε Ζεφυρος τε δυσσεως,*  
*Και Βορεης.* *Odys. v. 295.*

And

*Αλλοτε μεν τε Νοτος Βορη προβαλεσκε φερεσθαι*  
*Αλλοτε δ' αυτ' Ευρος Ζεφυρω ειξασκε διωκειν.*  
*Odys. v. 331.*

general name for easterly winds; οἱ ἀνεμοὶ ἀπὸ Ἀνατολῆς συνεχεῖς Ἑυροὶ κεκληνταί, (*De Mundo*, c. iv.) Musæus makes it one of the cardinal winds, and opposed to the west wind, Ζεφυρῷ δ' ἀντεπνεεῖν Ἑυροῦ (v. 316.). Dionysius, the geographer, says, "Italy is bounded on the eastern side (Ἑυρον) by the Adriatic." Stobæus follows Aristotle (lib. i.); and Arrian, in his *Periplus* of the Euxine, uses it to express the wind at due east.\* So much for the "invariable practice" of Greek writers.

Again, according to Bryant, the reading which Bentley contends for is "as new as the one he repudiates."

Here also facts are adverse to his arguments, for the oldest version (the Vulgate†), and the two oldest MSS. the Vatican and Alexandrian have it‡; but this is precisely one of the cases in which antiquity is the most important element in settling the value of a reading, for in such a case, if once a clerical error creeps in, there is nothing in the

\* Arrian, *Periplus Euxini* ap. Geog. Min. pp. 3 & 4. He was navigating due east, and tells us the wind (Ἑυρος) was ἀκριβως ἐναντιον, right ahead.

† The passage in which the word occurs is wanting in the older Italic version.

‡ In the Vatican MS. it is written both ways. Griesbach, however, says, "B. (Vat. MS) habet inter lineas *alio manu Ευροκλυδων*." — *Ευρακλων* is, therefore, the manner in which it has been originally written in this very ancient MS. According to Griesbach, the Sahidic has *Ευρακηλων*, and the Æthiopic *ventus aquilonarius*. See observations by Bentley and Penn, Appendix, No. 2. & 3.



context to enable transcribers to correct it, and the word in question is met with in no other writer.

Here, then, we have two separate and independent reasons for adopting the reading contended for by Bentley, namely, the etymological arguments adduced by him, which are clearly not shaken by Bryant, and the antiquity of the MSS. and versions in which this reading is found. But there are other and still stronger arguments depending on the effects ascribed to this wind by St. Luke. First of all we have a ship navigating the south coast of Crete, driven out to sea by it; but if it was from the *south* of east, this was impossible. In the next place, the ship was on her passage from Fair Havens to Port Phenice, when they met with this wind, and were driven by it towards Clauda; but there is no part of a ship's track between these places in which a south-east wind could have driven a ship to that island; and, lastly, when there, they were apprehensive of being driven to the Syrtes; but they could not possibly have entertained such fears had the wind blown from any point south of east.

We have therefore ample proof that the wind could not have been to the south of east; but unless the wind had been to the south of east it is utterly impossible that the ship could have been driven towards the Illyrian Gulf, as Bryant maintains she was.

The incongruity of compounding the Greek word

Eurus with the Latin Aquilo is dwelt upon by Bryant and others who contend for the common reading. Father Giorgi says: "Græcum nomen est Eurus, Latinum Aquilo, unde apud Græcum Lucam portentuosam et Centauricam fuisset eorum complexio in Vocabulo Euro-aquilonis." (p. 199.) But we find the same combination on another point of the compass, for in the list of winds given by Isidore, we have Euro-auster.

## DISSERTATION II.

## ON THE ISLAND MELITA.

I NOW proceed to notice the arguments brought forward by Bryant and others in support of the opinion that it was the Illyrian and not the African Melita upon which St. Paul was shipwrecked.

Bryant, after concluding his remarks on the wind Euroclydon, proceeds thus:—

“ Having thus dispatched, and I hope satisfactorily, what I first premised to take in hand, I come now to the second part, which was to ascertain the particular island upon which the Apostle Paul was shipwrecked. This, one would imagine, could be attended with no difficulty ; for it is very plainly expressed, that, after being tossed for some time in the Adria, they were at last cast upon the island Melite. The only question is, which is the sea called Adria, and what island can be found *in that sea* mentioned by such a name ?” (p. 23.)

This is not a fair statement of the question; the author of the narrative does not say Melita was in Adria, but only that the ship was *driven through* Adria, (*διαφερομενων*,) after leaving Claudia before she reached Melita. The real question is this. Was the sea which is interposed between Crete and Malta termed Adria, when the narrative was written? for it is not denied by Bryant that this sea was known by the name of Adria afterwards. It is only necessary to cast a glance at the map of the

Mediterranean to see that this part of it forms a natural geographical division. Major Rennel terms it, with much propriety, “ the middle basin of the Mediterranean.”\* Now, this sea, as well as the gulf at present known by the same name, was then known as the Adriatic. The proof of this is very easily established. Ptolemy, who flourished immediately after St. Luke, describes this sea so often and so particularly by this name, as to leave the point without a shadow of doubt. With the accuracy of a geographer he distinguishes the *Gulf* of Adria from the *Sea* of Adria; thus, in enumerating the boundaries of Italy, he tells us that it is bounded on one side by the shores of the Gulf of Adria, and on the south by the shores of the Adria †, (lib.

\* Humboldt calls it the Syrtic Basin. “ More to the west we have the Ionian Sea, or the Syrtic Basin, in which Malta is situated.”—*Kosmos, Sabine's Translation*, ii. 118. Procopius calls this basin the Adriatic Sea, and places Gaulos and Melita (Gozo and Malta) upon the verge of it, making them the boundary between it and the Tyrrhenian Sea on the west. “ ἀραμενοι τε κατα ταχος τα ιστια, Γαυλω και Μελιτη ταις νησοις προσεσχον αι το τε Αδριατικον και Τυρρηνικον πελαγος διο ριζουσιν.” *Bell. Vaud*, i. 14. Commentators gravely tell us that because Ptolemy calls Melita an African island it cannot be in the Adriatic sea.

† The only perplexing circumstance connected with Bryant's speculations on this subject is the fact, that he should have succeeded in persuading himself that St. Paul's ship was driven into the Gulf of Venice, as I believe he did. That he should have persuaded others by an array of one-sided evidence is not wonderful. Macknight, who has adopted his views, assigns this as his reason: he says, “ In support of his opinion, Bryant cites ancient authors, who, in enumerating the Adriatic islands,

iii. c. 1. “απο δε μεσημβριας τη του Αδριου παραλιω”; and that Sicily is bounded on the east by the sea of Adria, (Ib. cap. 4.) “απο δε ανατολων υπο του Αδριου πελαγους.” He further informs us that Italy is bounded on the south by the “Adriatic Sea” (Ib. c. 15.), that the Peloponnesus is bounded on the west and south by the Adriatic Sea (Ib. cap. 16.), and that Crete is bounded on the west by the Adriatic Sea (Ib. cap. 17.).

Here, then, we have the bounds of this sea, which Ptolemy sometimes calls Adria, sometimes the sea of Adria, and sometimes the Adriatic Sea, laid down with such precision, that it is difficult to understand how it could be made a question; and those who have not read Bryant's work must be puzzled to guess how he disposes of such proofs. The answer is that, although he adduces the authority of Ptolemy often enough when it answers

mention Melite very particularly.” (note, p. 128.) Mason the poet thus accounts for his self-deception: “He had been much engaged in antiquities, and consequently had imbibed too much of the spirit of a professed antiquary. Now we know from a thousand instances that no set of men are more willingly duped than these, especially by any thing that comes to them under the fascinating form of a new discovery.” The patronising manner in which he excuses the erroneous views, as he holds them to be, of such writers as Bentley, Grotius, Beza, Bochart, Cluverius, is amusing: the field they were conversant in was so ample, that “a person of the most extensive knowledge might sometimes be bewildered and lost.” (p. 65.) It is to be hoped that the school of antiquarians to which he belonged has now passed away.

his purpose, he passes over those parts of the work which bear directly on the question in total silence! I will, as in the case of his observations on Euroclydon allow Bryant to state his own case:—

“ The grand difficulty, and, indeed, an insurmountable one, lies here; that, as *St. Paul* says expressly that the island he was cast upon was in the *Adria*. *Malta*, to be proved the place spoken of, must be made an *Adriatic* island. To effect this the learned *Bochart* labours hard. He shows that the sea we are speaking of encroached upon the *Ionian*, — that it extended itself to the *Sinus Corinthiacus*; then, in order, it engrossed the Sicilian sea and the Cretan: and thus, advancing step by step, he includes Malta within its verge; makes the coast of Africa washed by its waves, and would persuade you that Leptis, in Agro Tripolitano, was situated upon the Adriatic coast. All this he does upon the authority of the poets and a few later historians.

“ As for the poets, their evidence is not worth taking notice of; they make every thing subservient to measure. Yet, even of these, nothing he quotes comes up to his purpose. The learned writer makes use of their trespasses, merely to prepare the reader for what is to come, that he may not be too much shocked by the violence of the after evidence. What Ovid and Tibullus say is only preparative. Philostratus and Pausanias come but half way; those that speak to the purpose are Procopius, Orosius, and Æthicus. These are they that advance the Adriatic to the confines of Barca; and by the same proceeding might make Carthage itself, if they pleased, an appendage to Ragusa.

“ But we ought to enquire of what rank and of what age the writers are whose authority he appeals to; \* \* \* doubtless writers of some eminence in their several times, so let them have their due; who lived, however, many centuries after the fact we are determining; so that all you can learn from their evidence in respect to St. Paul and his shipwreck, is how things

were called four or five hundred years afterwards; this is the utmost it will amount to." — (p. 26.)

It would be difficult to string together a greater tissue of blunders even from Bryant's writings. Yet with the exception of those mentioned in the foregoing paragraphs he has not noticed one of the authorities adduced by Bochart \* whom he undertakes to refute.

Let us examine his statement in detail. It begins with the double blunder of supposing St. Paul the author of the Acts, and that it is expressly said in the narrative "that the island he was cast upon was in the Adria;" the next assertion is that Bochart confines his authorities to the poets and a few later historians. The poets are easily disposed of, "they make everything subservient to measure." Let us, therefore, pass to the later historians. He says in one place that they are not to be believed because they "lived four or five hundred years," in another, "many centuries" after the fact.

The first question to be determined here, is the date of the fact, When did St. Luke write the account of the shipwreck? Without entering very minutely into the inquiry as to its date, I think it probable that it was written A. D. 63. Now two of Bochart's authorities, Ptolemy and Pausanias †,

\* See Bochart's observations on this subject, Appendix, No. 3.

† Ptolemy has recorded an eclipse observed by him in the eighth of Adrian (A. D. 125.), (Almagest, lib. iv. c. 9.): and

were contemporaries of Adrian, who was born A. D. 76. We do not know the dates of their births, but the chances are two to one against the supposition that they were both younger than the emperor. One of these authors, and it is immaterial which, was probably born about the time when St. Luke wrote, or very soon afterwards. The supposition that either of them invented the name does not require notice. But in point of fact there is ample evidence that this name was given to the lower sea, between Crete and Malta, long before either of them wrote. Like the seas in modern times this sea had different names. It was called the Ionian, the Sicilian, and the Adriatic. Bryant is at pains to extract passages from ancient authors, who used other names than the Adriatic, and, as might have been expected from such a line of argument, proves a great deal too much. If his arguments be good for anything there was no such sea at all as the Adria.

Pausanias speaks of that emperor as living when he wrote. He relates the legend of the fountain of Arethusa, which is said to be the river Alpheus, which flows under the Adria from Greece to Ortygia (Syracuse), *μηδε Ἀδριας ἐπισχῆσειν αὐτὸν τοῦ προσω*, "Nor can the Adria restrain its flowing on;" (Arcadica, lib. viii.) and speaks of the Straits of Messina, as communicating with the Adriatic and Tyrhenian seas (Elizæor, l. v.), Solinus does the same; he says, "*sunt et alteri montes duo (in Sicilia) Nebrodes et Neptunus, e Neptuno specula est in pelagus Tuscum et Adriaticum*," (Polyhistor, 6. xi.). Camertinus thinks that this author was a contemporary of Pliny, whom he abridged: "*suspicio vivente adhuc Plinio opusculum hoc suum scripsisse*" (Vita Solini).



This he admits in a note apparently unconscious that it destroys his own case. The note is as follows:—

“The truth is, Appian calls the whole *sinus* the Ionian Gulf: and not only Appian, but Dio, in lib. 41., and Herodian do the same; so far from extending the Adriatic to Sicily or Malta, they do not seem to allow that such a sea existed.” — Note, p. 33.

I proceed to Bryant's next argument which I will state in his own words:—

“It is observable, that in speaking of the natives, the sacred writer never calls them *Μελιταιοι* or *Νησιωται*, but *βαρβαροι*. The ancient Greeks called all nations that were not of Grecian origin indiscriminately *barbarians*. This continued for a long time; but after they had been conquered by the Romans, and, as it were, beat into good manners, they by degrees laid aside their saucy distinction, and were more complaisant to their neighbours. Hence we find that Polybius, Diodorus, and others, who wrote after the decline of the Grecian power, seldom made use of the distinction, unless the people they treat of are notorious for their ferity or rudeness. But supposing a Grecian writer might continue this partial distinction, and look upon every country but his own as barbarous, yet St. Paul cannot be supposed to have acted so. He was no *Greek*, but a *Jew* of *Tarsus*, and in the same predicament as those that are spoken of.

“Whenever the Apostle calls a people barbarous, you may be sure it was the real character of the nation.” — (p. 39.)

We have here again the blunder of supposing St. Paul the author of the Acts, and the still greater one of supposing that St. Paul would only have applied the term barbarian to people “notorious for ferity and rudeness.” St. Paul repeatedly uses the word; but upon no one occasion does he

use it in the sense which Bryant supposes he would, or in a sense inapplicable to the antient inhabitants of Malta, in contradistinction to the Greeks. The Melitans were not Greeks, therefore they were barbarians. (Rom. i. 14.) If they did not understand the language of him who addressed them, then each party would be barbarous to the other. (1 Cor. xiv. 11.) The natives would not understand their visitors, therefore they were barbarians.

Bryant is at great pains to contrast the civilisation of the antient inhabitants with that of the Illyrian Melitans. He tells us, that according to Diodorus Siculus, and others,

“*Melite Africana* was first a colony of *Phœnicians*, and was afterwards inhabited successively by Carthaginians, Greeks, and Romans. Who will be so hardy as to denominate any of these nations barbarous?”

The answer to this question is not difficult; nobody called the Greeks barbarians, but Scylax calls the Phœnicians barbarous \*, and Polybius makes one of his speakers, a Greek, call both the Carthaginians and Romans barbarians.†

In his anxiety to vindicate the antient Maltese from the charge of barbarism he actually quotes

\* Scylax places the Phœnicians amongst the inhabitants of Sicily, who are barbarians. “Εν δε Σικελία εθνη βαρβαρα τα δε εστιν, Εδυνοι, Σικανοι, Σικελιοι, Φοινικες, Τρωες.” — *Periplus*, p. 4.

† Agalaus of Naupactus advises the Greeks not to fight with each other, but unite to resist the barbarians (the Romans and Carthaginians). Hist. lib. v. 104.

the Acts to show that the term did not even apply to the lower orders—again unconscious that he was overturning his own argument, by admitting that it was the Maltese who received them hospitably.

“But it is said that some of the lower sort might still be rude and savage, though the people of rank were otherwise. But St. Paul experienced nothing but civility from the lower sort, nay, *οὐ τὴν τυχοῦσαν φιλανθρωπίαν*, uncommon civility, as *he himself witnesses*. Therefore, if the common people are civil and humane, and their superiors polite and ingenious, a general imputation of barbarism can never square with that nation. In short, take them separately or collectively, this stain is incompatible with the natives of Malta.”—(p. 42.)

The next argument is, that there are no vipers in Malta; but St. Luke mentions that one fixed itself on St. Paul's hand. (v. 3.) Bryant does not dwell much upon this, but Giorgi lays considerable stress upon it, and Dr. Falconer\* does the same. Both of these writers attribute the presence of these animals in Meleda to the moisture of the climate, caused by its woods, “*densissimas habet silvas*,”

\* “The circumstance of the viper or poisonous snake that fastened on St. Paul's hand merits consideration. Father Giorgi, an ecclesiastic of Melita Adriatica, who has written upon that subject, suggests very properly that as there are now no serpents in Malta, and as it should seem were none in the time of Pliny, that there never were any there. The country being dry and rocky, and not affording shelter or proper nourishment for animals of that description. But Meleda abounds with these reptiles, being woody and damp, and favourable to their way of life and propagation.”—*Falconer*.

(Giorgi)\* and their absence from Malta to its aridity. I am not disposed to call this in question.

At present Malta is entirely clear of wood, and its surface is in the most artificial state; but when St. Paul visited the island this was not the case, for it was from "a bundle of sticks" which St. Paul had gathered, that the animal came. We have here a very sufficient cause for such a change in the Fauna as will account for the disappearance of this species of reptiles, as already noticed in the account of the voyage.

Bochart says, that as the ship in which St. Paul sailed from Melita, was on her voyage from Egypt to Puteoli, we cannot suppose she would winter at the Illyrian Melita, if she did, she must have gone much out of her way, "*toto salo aberasse.*" Bryant meets this with the case of Lucian's ship which was driven to Athens. He says,

"Upon Bochart's principle one might argue that this ship, coming to Africa and the Piræus must be a mistake, for it was certainly Malta that it arrived at, because Attica is quite out of the way for any ship to touch at that is bound from the Nile to the Tiber, — '*Totæ cœlo et toto salo errant,*' &c. But ships that lose their passage cannot always choose their retreat, they are at the will of the winds, and are sped in all directions." — 8vo. edit. p. 412.

But there is no parallelism whatever in the cases: ships crossing the Ægean, as this ship was, may

\* Giorgi consulted Vallisneri a celebrated naturalist, who proved by experiment that the earth of Malta was no protection against the bite of a viper.

meet with a southerly gale and be driven to the north. Every reader of Falconer's *Shipwreck* must be familiar with such a case; the ship was driven from Crete towards Athens:—

“ Now, through the parting waves, impetuous bore,  
The scudding vessel stemmed the Athenian shore; ”

but, less fortunate than that of Lucian, was wrecked on the coast of Attica. But if we are to believe that *Adria* means the Gulf of Venice then we must suppose that by some means or other almost every ship coming from the Levant, to the west side of Italy, found its way into it. We hear of four cases of ships in this predicament all about the same time, possibly in the same year:—1st. St. Paul's ship. 2d. The *Castor* and *Pollux*. 3d. The ship of *Josephus* which sank in *Adria*. 4th. The ship of *Cyrene* which picked him up and carried him to *Puteoli*.\*

The only other argument against the supposition that *Malta* was the scene of the shipwreck which remains unanswered, is brought forward by Dr. Falconer, he says —

“ The disease with which the father of *Publius* was affected (dysentery combined with fever) affords a presumptive evidence of the nature of the island. Such a place as *Melita Africana* (*Malta*), dry and rocky, and remarkably healthy, was not likely to produce a disease which is almost peculiar to moist situations.” (p. 21.)

It is obvious that the answer to the former argument applies also to this one; but in point

\* *Josephus Vita*, edit. *Hudsoni*, p. 905.

of fact Dr. Galland of Valetta informs me that the disease is by no means uncommon in Malta.

L'Avocat\*, a French writer, merely repeats without adding anything to the arguments of Giorgi. He does not, however, as Bryant and Falconer have done, pass over the unequivocal testimony of Ptolemy in silence; he says —

“ Ptolomée, qui n'a vécu que plus de 80 ans après St. Luc, est le premier qui a donné plus d'étendue à la Mer d'Adriatique au Golfe de Venise.” — (p. 40.)

The answer to this is, that we do not know that Ptolemy lived even one year after St. Luke; neither was he the first who used it. I have already noticed his contemporary, Pausanias, who also used it, and as Major Rennel observes, “ changes of names in geography take place very gradually, and almost imperceptibly.”† But Josephus who made the same voyage, and probably in the same year, if not the year before, tells us in his life that his ship sank in the Adria‡, and that he and others were

\* *Dissertation Historique et Critique sur le Naufrage de St. Paul, dans laquelle on examine si c'est dans l'isle de Meleda qu'il fut mordu d'une vipère, et qu'il guérit miraculeusement le père de Publius.* — 1745.

† Father Giorgi admits that after the time of Ptolemy the name of Adria was almost universally adopted; he answers the question: “ Cur autem, si universi antea geographi secus docuerat, nova hæc atque insolens opinio non per gradus sed quasi uno impetu deinceps apud scriptores invaluerit?” by attributing it to the celebrity of Ptolemy.

‡ Dr. Gray supposes that Josephus was in St. Paul's ship! *Connection of Sacred and Profane Literature.* — i. 362.

picked up by a ship of Cyrene and carried to Puteoli. The events related by Josephus could not have happened in the Gulf. Ovid repeatedly calls this sea *Adria*\*, and Horace places Actium on *Adria*.†

There is another modern writer who takes the same side of the question who is entitled at least to the merit of originality. In a modern French work entitled, "L'Univers," M. La Croix, the author of the account of Malta tells us —

" Q'on remarque bien qu'il avait fait halte dans un port de la côte *septentrionale* de Candie :"

that the wind Euroclydon is —

" suivant Pline, Vitruve, Aristotle, et Strabon, un vent qui tient le milieu entre le midi et le levant ; c'était donc, pour parler le langage moderne, un vent de sud-est, ou ce qu'on nomme dans la Méditerranée le *sirocco*. Sur ce point il ne peut y avoir un ombre de doute."

He then asks,

" Dira-t-on que l'Ecriture Sainte a pu confondre la mer de Sicile, où est située Malte, avec la Mer Adriatique ? Une telle

\* *Adriacumque patens late bimaremque Corinthum.*

*Fasti*, lib. iv. 501.

Aut hanc me, gelidi tremere cum mense Decembris,

Scribentem mediis *Adria* vidit aquis ;

Aut, postquam bimarem cursu superavimus Isthmon,

Alteraque est nostræ sumta carina fugæ.

*Trist.* lib. i. Eleg. 12.

† Actia pugna,

Te duce, per pueros hostili more refertur ;

Adversarius est frater ; lacus, *Adria*.

*Epist.* lib. i. Ep. xviii. ver. 61.

supposition est inadmissible. D'aborde, Malte est très-éloignée de la Mer Adriatique ; ensuite cette mer n'a jamais eu d'autres bornes que celles que les géographes lui assignent aujourd'hui ; elle a toujours été deux cents lieues de longueur sur quarante dans sa plus grande largeur ; dimensions sur lesquelles s'accordent Pline, Strabon, et Thucydide."

The information that Fair Havens is on the *north side* of Crete ; that Pliny, Vitruvius, Aristotle and Strabo tell us the direction of Euroclydon ; and that Pliny, Strabo and Thucydides tell us that the Adriatic never had other boundaries than its present, requires confirmation. M. La Croix cannot understand how, if Malta had been the island, St. Paul could have been delayed three months. The island, wherever it was, he says, must have been "bien peu fréquentée par les navigateurs, ce que n'a jamais été vrai pour Malte ;" he should have added, not even in winter. It would be a waste of words to answer such arguments.



## DISSERTATION III.

## ON THE SHIPS OF THE ANTIENTS.

THERE are few branches of classical antiquity of which so little is known as that which relates to ships, navigation, and seamanship; no work written expressly on those subjects by any antient author has come down to us\*, and the scattered notices which we meet with in historians and poets often tend to mislead. The representations of antient ships are in a great measure confined to coins and marbles where we cannot expect to find accuracy of detail, except in detached parts, such as the aplustra or head and stern ornaments, rudders, anchors, &c.

There are, however, two circumstances to which we are indebted for much valuable information respecting the very class of ships with which we are at present chiefly concerned.

The Emperor Commodus, during a season of scarcity, imported grain from Africa; in commemoration of which a series of coins (great and middle brass) was struck, bearing upon the reverse figures of ships under sail; and one of the Alexandrian wheat ships was driven, by stress of

\* The Emperor Leo, in his *Tactics*, in treating *περι ναυμαχίας*, makes the same complaint. He says he could find nothing written on the subject by the antients.

weather, into the Piræus. The extraordinary size of this vessel excited much curiosity on the part of the Athenians; and Lucian, who visited her, lays the scene of his dialogue entitled "The Ship or Wishes" (Πλοιον η Ευχαι) on board of her; in the course of which we learn, incidentally, many interesting circumstances regarding the ship, her voyage, and management.

The marbles and paintings of Herculaneum and Pompeii also afford valuable details, and have the advantage of synchronising perfectly with the voyage of St. Paul, the catastrophe to which they owe their preservation having happened less than twenty years after his shipwreck

As all these authorities agree very well with each other, we can derive from them what we may consider a tolerably correct idea of a merchant ship of the period.

The forepart of the hull below the upper works differed but little in form from that of the ships of modern times; and as both ends were alike, if we suppose a full built merchant ship of the present day, cut in two, and the stern half replaced by one exactly the same as that of the bow, we shall have a pretty accurate notion of what these ships were. The sheer or contour of the top of the sides was nearly straight in the middle, but curving upwards at each end, the stem and stern posts rising to a considerable height, and terminated by ornaments which were very commonly the head and neck of a

water-fowl bent backwards. This was called the cheniscus (*χηνισκος*). It forms the stern ornament of the ship on the tomb of Nævoleia Tyche at Pompeii, the stern post of which terminates with the head of Minerva. Lucian, in describing the Alexandrian ship, mentions that the stern rose gradually in a curve surmounted by a golden cheniscus, and that the prow was elevated in a similar manner. In the coins of Commodus we find the cheniscus, in some instances, at the head, and, in others, at the stern.

The bulwarks round the deck appear to have generally been open rails. There were projecting galleries at the bow and stern. The stern gallery is often covered with an awning, as in the ship on the tomb of Nævoleia. The galleries at the bow served, as it would appear from Lucian's description, as places where to stow the anchors and also the *στροφεία* and *περιαγωγείς*. The exact meaning of these terms is not clear. Some think they meant instruments for heaving up the anchors, others for helping the ship round. I think it not improbable that both were meant. The *στροφεία*, "winders," were probably windlasses or capstans. We have evidence that both were used by the ancients, for in the ship of Theseus, represented in one of the paintings found at Herculaneum, we see a capstan with a hawser coiled round it\*; and in a

\* See figure of this ship, *ante*, page 95.

figure of the ship of Ulysses said to be taken from an ancient marble, in the edition of Virgil, 3 vols. fol., Rome, 1765, we see the cable coiled round a windlass. The *περιαγωγεις*, "drive abouts," were probably paddles for the purpose of helping the ship round, when "slack in the stays."

The ancient ships were not steered, as those in modern times are, by rudders hinged to the stern-post, but by two great oars or paddles (*πηδαλια*), one on each side of the stern: hence the mention of them in the plural number by St. Luke; a circumstance which has caused, as Dr. Bloomfield observes, "no little perplexity to commentators."\*

\* Note to Acts xxvii. 40. This is scarcely to be wondered at, at least by those who have had recourse to the most obvious sources of information—the writers *de re navali antiquâ*. Berghaus, the most voluminous, and, I believe, the most laborious writer on the subject, has given a restoration of the after-part, "Hintertheile" of St. Paul's ship, with a square stern, a single hinged rudder, with the tiller pointing aft, and with rudder bands with dead eyes spliced into the ends! about as like an ancient ship as a Chinese junk is to an English yacht. The work of this author, which is entitled "*Geschichte der Schiffartskunde der Vornehmsten der Alterthums*," 8vo, Leipzig, 1792, is in three ponderous volumes (1670 pp.), scarcely a page of which is not fortified by an array of authorities, all of which, he tells us, he has verified ("*habe ich meines Wissens kein Citatum von andern auf treu und glauben unternommen, ohne von der Richtigkeit desselben überzeugt zu seyn*." Vorrede, xxiv.). As may be supposed, he has carefully preserved all the blunders of his predecessors; his anchors have no stocks, and the artemon is set at the mast-head. This author is fairly outdone in absurdity by M. le Roy, author of "*Mémoires sur la Marine des Anciens*," Hist. de l'Acad. des In-

But no sea-going vessel had less than two rudders, although small boats and river craft, such as those on the Nile, were sometimes steered by one. Dr. Bloomfield is at the very unnecessary trouble of quoting a passage from Orpheus to prove, what was in fact the universal practice, that large ships had two rudders, and that it is—

“Probable they were regularly taken off when the ship was in port and laid in dock. But the question is, *how* and *where* were they fixed on? Many (as Alberto, Bishop Pearce, and Kuinoel), think that the rudders were one at the stern and the other at the bow of the ship; while others suppose both to have been at the stern. I know not, however, of the numerous passages cited by the above commentators, any one that *determines* this point; but that which I have adduced from Orpheus undoubtedly does—namely, as we have seen that they were both at the stern.”

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script., tom. xxxviii.; of “Nouvelles Recherches sur les Navires des Anciens,” Mém. de l’Institute, tom. i.; and of “Les Navires des Anciens considérés par rapport à leurs Voiles,” 8vo, Par. 1783. M. le Roy has undertaken to explain the difficulties attending the description of the ship of Ptolemy Philopator, given by Athenæus; amongst others we are told by that author that she took twelve hypozomes (undergirders) with her (ὑποζώματα δε ελαμβανε δωδεκα); this he renders, “Il avoit douze ponts ou étages,” twelve decks or platforms! but the most amusingly absurd part of his writings is his work on the sails of ancient ships,—a full-rigged ship, according to him, had a lateen sail at the bow (le dolon); the main-sail (l’acatian) is, in his representation, triangular with the apex below; farther aft than this was another lateen sail (l’artemon), and at the stern another lateen sail (l’épidrome). M. le Roy had a boat rigged in this manner, and found she could both tack and turn to windward. Probatum est.

Writers are not in the habit of telling what every one knows. I question if I could prove, by a quotation, that the rudders in English ships are at the stern ; but every representation — and they are numerous — shows us that those of the antients were there. Commentators who suppose that the two rudders in sailing ships were, one at the head and one at the stern (“ unum in prora alterum in puppi ” — *Kuinoel*), have been misled by a passage in Tacitus (An. ii. 6.) who is not describing sailing vessels, but flat-bottomed boats on the Rhine, which were to be moved by the current, and had a rudder at each end, just as river boats of the same description have at the present day, in which the ancient paddle rudders are retained. With regard to the question how they were fixed, the answer is, that they were not fixed any more than other oars are. In small vessels they rested in a notch, or rowlock, in the upper gunwale, and were secured by a tro-poter, or leathern thong, or by an iron clamp. Instances of both modes of retaining the rudder in its place may be seen on Trajan's Column. In those vessels which had projecting gangways, or stern galleries, the rudders were often passed through them.\* Some larger vessels had a rudder case fixed on the outside, on each quarter. In others

\* There is a bronze model of a ship under sail in the Grand-ducal gallery at Florence, with the rudders fitted in this manner. See also the figures of galleys on the coins of Adrian, p. 191.

the wales of the ship projected far enough from the side at the stern to allow space for the rudder to pass through them. This may be observed in the ship on the Tomb at Pompeii \*; but the most common way was to have rudder ports at each quarter, as in the ship of Theseus (see figure at page 95.). These also served for hawseholes, when the ship was anchored by the stern. This mode of steering was retained till a comparatively late period. In a bass-relief over the doorway of the leaning tower of Pisa, built in the twelfth century, ships are represented with the paddle rudders, as are those in the Bayeux tapestry, representing the Norman invasion. They must have been in use till after the middle of the thirteenth century, for in the contracts to supply Louis IX. with ships, the contractors are bound to furnish them with two rudders (*duos timones*).† This may no doubt mean a spare one, but we learn from Joinville that the king's ship had rudders expressed in the plural *Gouvernaus* (ch. 78.).

By the middle of the following century we find the hinged rudders on the gold noble of Edward III. The change in the mode of steering must,

\* In the *Peregrinatio ad terram Sanctam* of Breydenbach, Ven. 1486, in which the details of the figures of ships are extremely correct, we have the figure of a ship in the transition state, in respect to her rudders. She has a hinged rudder, but she has also a paddle rudder slung at her side, passing through the wales, as in the above example. See *View of Modon*.

† *Archæologie Navale*, ii. 388.

therefore, have taken place about the end of the thirteenth, or early in the fourteenth, century.

With regard to the dimensions of the ships of the antients, some of them must have been quite equal to the largest merchantmen of the present day. The ship of St. Paul had, in passengers and crew, 276 persons on board, besides her cargo of wheat; and as they were carried on by another ship of the same class, she must also have been of great size. The ship in which Josephus was wrecked contained 600 people. But the best account we have of the size of some of these ships is that which I have already alluded to as given by Lucian, on the authority of the carpenter (*ναυπηγος*) of the Isis, the Alexandrian wheat ship, which was driven by contrary winds to Athens. Both Bryant\* and Dr. Falconer adduce this ship as an example of the great size of vessels of the class to which she belonged; but both of them exaggerate her dimensions to an absurd degree. Bryant compares her with the Royal George, which was at that time probably the largest ship in the British navy, the dimensions of which he gives; but, with his usual inaccuracy, he makes the breadth of the antient ship one third, in place of one fourth of her length, or nine feet broader, instead of six feet narrower than the Royal George. Dr. Falconer corrects this error, but falls into one nearly as great;

\* Bryant's Observations, p. 16.



for, in calculating her tonnage, he multiplies by the length given by Lucian, which is evidently the extreme, instead of by the length of the keel, which was till lately the rule, and is the only one applicable in cases where the only dimensions given are length and breadth. The consequence of calculating in this manner is, that he increases her tonnage by at least one half, making it more than 1900 tons, whereas it must have been less than 1300. The rule by which the tonnage of the Royal George was computed, was to multiply the length of keel\* by the extreme breadth, and the product by half the breadth for depth, and divide the whole by 94. Dr. Falconer has made the ship of Lucian to measure 1938 tons. Her length, according to Lucian, was 120 cubits, which, at a foot and a half each, is 180 feet; her breadth one fourth, or 45 feet. Now, it is evident, that Dr. Falconer has calculated in the manner I suppose: for if we take the extreme length, 180 feet, as the multiplier, the tonnage is exactly what he makes it,  $\frac{180 \times 45 \times 22.5}{94} = 1938$  tons.

Although we have no means of knowing the length of this ship's keel, we may, from the dimensions given by Lucian, form an estimate of her relative size, as compared with any other ship, the

\* As the fore part of the keel joins the stem-post in a curve, in order to obviate uncertainty it was measured as far as the perpendicular of the length aloft, and three-fifths of the breadth of beam deducted for the fore-rake.

dimensions of which are known. I take the Royal George, as the ship these authors compare her with, and the dimensions of that ship, as given by Bryant, which appear to be correct; but as the height is given in one case to the taffrail, and in the other to the upper deck, I take one half of the breadth for the depth, which is the usual rule for computation, in both cases. Hence,

Royal George  $212.75 \times 51 \times 25.5 = 667.300$

Isis, Lucian's ship  $180 \times 45 \times 22.5 = 356.400$

This is in the ratio of 2000 tons to 1320; if, therefore, the keel of the antient ship was as long in proportion to her extreme length as that of the Royal George, she would measure upwards of 1300 tons, but we know that the antient ships had projections at each end, much greater than in modern ships, and, as they are not included in the measurement for tonnage, they must be deducted: that, at the prow of the one in question is distinctly mentioned by Lucian. In the Navicella at Rome the keel is only about half the extreme length.

Perhaps an early built English ship, when the antient "beak head," or projection forward, was still retained, will give the most correct idea of her proportions. We have a very particular account of the Royal Sovereign \*, or, as she was called

\* See account of her, bearing the title, "The Commonwealth's great ship, commonly called the Sovereign of the Seas, built in the year 1637, with a true and exact account of her bulk and burden, and those decorements which beautify and

during the Commonwealth, "The Sovereign of the Seas." Her length is stated to be "a prora ad puppin, 232 foote," the length of the keel 120 feet.

If the keel of the antient ship bore the same proportion to her length, "a prora ad puppin," which this one did, it would be only 99 feet and, the tonnage, calculated by its length, instead of the extreme length, would be 1015 tons. Taking the mean of the two results, it is probable that the ship of Lucian would measure between eleven and twelve hundred tons. Although, therefore, her dimensions are not so wonderful as former calculations make them, they were quite equal to those of the largest class of modern merchantmen. We need not, therefore, be surprised at the numbers we sometimes hear of as being carried in antient ships.

From every representation which has come down to us, as well as from every notice in authors, they appear to have been rigged with extreme simplicity. They depended for progression upon a single square sail, all the other sails which we hear of being subsidiary. It is evident that this was the case in Lucian's ship, notwithstanding her unusual size. We hear of his friends looking up with wonder on the magnitude of the mast and yard; the

adorn her, with the carving work, figures and mottoes upon them. She is besides her tonnage, 1637 tons in burden; she beareth five lanthorns, the biggest of which will hold ten persons to stand upright, without shouldering or pressing on one another, with the names of all the ropes, masts, sails, and cordage that belong unto a ship." 4to. Lon. 1653.

sail therefore must have been furled aloft. We hear, indeed, in another part of the same dialogue of ships with three sails (*τριαρμενα\**), but we are not told whether they were set upon separate masts, or one above another. From the manner in which they are mentioned, it is obvious that these three-sailed ships were of the largest size; we must conclude, therefore, that it was not a common circumstance to have so many as three principal sails. What may be considered, therefore, as the plain sails of an ancient ship consisted of one great square sail, with a small one at the bow.

The following figure, taken from the Archæo-



\* Lucian has mentioned a circumstance which has perplexed commentators, and which I do not pretend to explain: he speaks of "looking up and counting the piles of hides" (*ανα-ελεποντες αριθμουντες των βυρσων τας επιβολας*), or rather, of hides placed above each other. Scheffer supposes that by hides the author means sails, which, he says, "*ex corio pellibusque*

logie Navale of M. Jal, from a marble in the Borghese collection at Rome, appears to give a good idea of the relative size and position of the sails, except that the mainmast is evidently placed too near the bow.

We hear of other sails, but from the manner in which they are mentioned by Pliny\*, we must suppose that they were considered as extra sails. Julius Pollux calls "the great and proper mast" (ὁ μέγας καὶ γνησιος ἱστός) the acatian: he adds, however, that some give that name to the smallest.

primum facta videntur. Nomen indicare potest, est enim velum a vellere, id est pelle, ut Varro docet." (p. 141.) He translates the above passage "sursum spectantes numerantes vela alia aliis imposita," adding the following criticism on the Latin translation; "interpres ibi coria scripsit quod nullum habet sensum."

\* "Jam nec vela satis esse majora navigiis. Sed quamvis amplitudini antemnarum singulæ arbores sufficient, super eas tamen addi velorum alia vela præterque alia in proris et alia in puppibus ac toto modio provocari mortem"—*Proem.* in lib. xix. This is surely a non sequitur; it could be no good reason for not setting more sail that single spars were sufficient for the size of the yards. Instead of "quamvis," the reading "cum vix" has been suggested. I am, however, satisfied that the word "non" has been dropped out, and that it ought to be read, "singulæ arbores *non* sufficient." In point of fact, single spars are *not* sufficient for the great yards of the single-masted Mediterranean vessels of the present day; and we find wherever the details are correctly given, that the same was the case in the middle ages, and in ancient times. See the views in Breydenbach, and the ship on the tomb at Pompeii. Pliny's dislike of additional sails does not say much for his seamanship, although he died in command of a fleet; it proves, however, that they were only occasionally used.

Xenophon\*, on the other hand, calls the principal sails "the great sails," *τα μεγαλα ιστια*, and the small ones *acatia*. The propriety of Xenophon's terms is confirmed by the Attic Tables, which speak of the *acatia*, in contradistinction to the great sails.

The name of the small sail at the bow of the vessel, or the fore-sail, has very generally been supposed to be the *dolon*. I believe, however, that this is a mistake, and that the name of this sail was the "*artemon*." As this is the name of the sail stated by St. Luke to have been hoisted when the ship was run ashore, and as lexicographers and translators differ as to the meaning of the word, I shall endeavour to ascertain what is its true meaning, by adducing all the evidence I have been able to discover on the subject.

The word *artemon* (*αρτεμων*) does not occur in any ancient Greek author, except in St. Luke's account of St. Paul's voyage; neither does it occur in any mediæval Greek author. It is, however, still used in the French nautical vocabulary, to designate the sail at the stern (the *mizen*, or, in modern language, the *spanker*, *driver*, or *mizen trysail*). Hence the French translators, by using the word *artimon*, give it that meaning. In our authorised version it is rendered "*mainsail*." In Wyclif's it is "*a litil sail*." Dr. Bloomfield

\* Xenophon, in the *Hellenica* (lib. vi.), speaking of the manner in which Iphicrates exercised his crews, says, he left "the great sails," *τα μεγαλα ιστια*, and took the small ones, *ακατια*.

considers it to be "the foresail." It is, however, most commonly supposed to be the same as the *supparum* or topsail.\* Bök h supposes it to be the highest of all the sails, equivalent to the modern top-gallant-sail. He says, "there was also, above the upper sail (obern Segel), a third smaller sail, which is doubtless the *artemon*."† Alciati supposes it "the bonnet," or addition to a sail, which can be removed. Papias Vocabulista makes it a storm-sail‡, &c. It has also been supposed to mean the mast, the yard, the rudder, the vane at the mast head, the main block, &c.; but it is unnecessary to take these latter suppositions into consideration, as they are manifestly untenable. We learn from Isidore of Seville that the *artemon* was a sail, and the question is which sail was it? I shall endeavour, in the first place, to point out what sails it was not.

Professor Bök h says very decidedly (ohne Zweifel) that it was the highest sail of all, but does not give his reasons, as being foreign to his object, the *artemon* not being mentioned in the Attic Tables (p. 140.). I presume, however, he derives them from the following passage in Scheffer:—"Nomina eorum (velorum) ex Polluce hæc sunt . . . *artemon*

\* "*Ἀρτεμων*, Supparum das ober am Mast hing."—*Berghaus*. See also Schneider, ad verb.; Scheffer, p. 140. &c.

† "Ausser der untern und obern Segeln der beiden Masten liess sich gewiss auch ein drittes kleineres anbringen; und dieses ist ohne Zweifel der *Artemon*."—p. 140.

‡ "*Artemon*, velum navis breve, quod quia melius levare potest in summo periculo extendit malus et antenna."

quod in fuso supra antemnam suspenditur." — *Milit. Naval.* (p. 140.)

Now, there can be no doubt but that if the artemon be suspended from the spindle at the mast-head, it must be the highest sail. Scheffer gives Pollux as his authority; but, upon turning to Pollux, we find that it is the *vane* (ἐπισείων) at the mast-head he is speaking of, and not the artemon. Scheffer had looked at the Latin translation, which is, "Et quod supra antemnam est fusus nominatur, a qua parte artemonem suspendunt," and not, at the original, which is τὸν ἐπισείοντα, the streamer or vane, so called from its fluttering motion. The translator, ignorant of the meaning both of this word and artemon, has chosen to translate the one by the other, and Scheffer has adopted his blunder, and from him it has become traditional, and has been adopted by every succeeding writer "de re navali." Scheffer himself, however, became aware of his blunder, and explains it away, ingeniously, if not ingenuously, in the Addenda to his work. He says —

"Ἐπισείων, idest tænia, seu velum ludens in aere . . . forte hoc este quod Artemona Isidorus ait, quia ἀναπτῶσι τοῦ ἀρπακτοῦ, ut Pollux loquitur, dirigit sane navem quia ex ejus situ gubernatores ventum cognoscent!"

which is as much as to say that because the vane or streamer shows the direction of the wind, it must be synonymous with the artemon, which Isidore says was principally useful in directing ships.



We may very safely reject this explanation of the word, which takes its rise in a blunder.

I come now to those who translate it the mizen or sail at the poop. The cause of this is obvious enough: the word *artimon* still exists in the French nautical vocabulary, and translators, not competent to determine whether it retains its original signification or not, have very naturally left the word unchanged. They have committed the same error which an English translator would do who should render the French word "*misaine*," the foresail, into "*mizen*," for there can be no doubt but that, in this case also, the words in both languages are originally the same, coming from the Italian *mezzana*, middle size, in contradistinction to *vela grande*, although the *mât de misaine* has changed its place as well as the *mât d'artimon*. Before I show that such a change has taken place, I shall consider our English translation where it is rendered mainsail, because the evidence which clears up this mistranslation explains the other also.

The English translators naturally consulted Bay-fius, or De Baif, the earliest of the modern writers "*de re navali*," and probably the only one when the translation was made; he thus explains the word:

"*Est autem artemon velum majus navis, ut in Actis Apost. xxvii. . . . etenim etiam nunc nomen Venetis vulgo retinent et Artemon vocant.*"

It appears, therefore, that, when this author

wrote in the middle of the sixteenth century, the word was still in use at Venice as a marine term, and that it meant the *velum majus*, or *largest sail* in the ship. De Baif is good authority, because it appears that he had spent the three years preceding the publication of his work at Venice. But the largest sail of the Venetian vessels of the time was the *foresail*. The error, therefore, does not lie with him, but with the translation of *velum majus* into *mainsail*. The mainsail was at first, no doubt, the largest sail; but, in very many vessels, it has ceased to be so. In modern ships, it is smaller than the maintop-sail, and in many two-masted vessels, it is smaller than the foresail. Dr. Bloomfield, in his Note on the subject, states that "Bayfius, Junius, Alberti, and Wolf, explain it as the large sail of the poop, answering to our mizen-sail, and even yet called by the Venetians *artemon*." (Note on v. 40.) This, however, is a mistake: it was the largest sail in two-masted vessels of the period; but, instead of being at the poop, it was at the prow; it was in reality the *foresail*. The word, although formerly an Italian nautical term, has now become obsolete in that language. The Vocabolario della Crusca calls it "*la maggior vela che abbia la nave*," and quotes Dante \*

\* "Chi ribatte da proda, e chi da poppa,  
Altri fa remi, et altri volge sarte;  
Chi terzeruolo et Artimon rintoppa."

*Inferno*, canto xxi. st. 5.

and Ariosto\* as authorities. There is nothing in Dante but a mere enumeration of terms; but in the Commentary of Landino upon that author, printed at Venice in 1493, we find the following remark on the passage: "La minore, terzeruolo, et una in mezzo delle due lequale si chiama la mezza." This at least shows that it was not in the middle of the vessel, or the mainsail, but at one end. The terzeruolo is said to be the smallest sail; in the modern Italian nautical nomenclature, it means "a reef," or the part of a sail tied up to reduce it. It is clear then, that if the artemon was neither the sail in the middle nor the smallest sail, it must have been the foresail, which was the largest sail in the vessel when Landino wrote.

Ariosto, in the passage quoted in the Vocabolario, says the artemon was cut away: —

"Il padrone  
Fatto l' arbor tagliar dell' Artimone."

He says afterwards that, when the storm subsided,

"La disiata luce di Sant' Ermo,  
Che *in prua* su un cocchina a por si venne,  
Che più non v' erano arbori nè antenne."—xix. 50.

"Saint Ermo's light  
Low settling *on the prow* with ray serene  
It shone, for masts or sails no more were seen."

*Hook.*

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\* "Di cui per men travaglio avea il padrone  
Fatto l' arbor tagliar dell' artimone."

*Orlando Fur.* c. xix. st. 48.

The artemon was, therefore, according to Ariosto, the mast of the prow, for it was that mast which had been cut away.

The latest authority which I can find for the meaning of this word in Italian is in the "Dizionario di Marina," Venice, 1769. It does not occur in the dictionary itself; but, in the index, the reader is referred to "Trinchetta" as its synonyme. Now the trinchetta, in modern Italian, is the foresail; in the dictionary it is described as "vela triangulare che in alcuni bastimenti si pone nel davanti o a prua." I think this passage explains the reason why the French term artimon is applied to the sail at the stern. The foresail, anciently, was very often a triangular or lateen sail.\* Latterly, and up till the end of the eighteenth century, the mizen was a triangular sail; when, therefore, the triangular sail was placed at the stern by the French, it retained the name which had been given to the triangular sail when placed at the bow. From the dimensions of the sails taken from the contracts of the Genoese with Louis IX. of France, to be afterwards quoted, it will be seen that the artemon, although placed at the bow, was in fact the largest sail. This is confirmed by one of the figures in the views of Breydenbach.† The ship in question

\* "Artimon c'est une voile latine ou faite en tiers pointe a la difference des autres voiles qui sont quarées."—*Aubin, Dict. de Marine*, 1702.

† This ship is figured in Creuze's article on Ship-building, *Encyc. Brit.*, 4th edit. See also another ship taken from the same view in Dibdin's *Ædes Althorpiæ*. Vol. iii. p. 222.

is a two-masted vessel, with the sails furled on the yards, the foremast being the largest. De Baif was, therefore, correct in saying that the artemon was the largest sail in the ship.

I come now to the ships of the middle ages, and avail myself of the documents published by M. Jal in his *Archæologie Navale*. From the *Capitulaire Nautique*, 1255, we have the following list of sails of ships of certain dimensions:—

“Navis de milliariis ccc usque dc in proda ita sit contata in velis, habeat artimonem terzarolem et dolonum, unum de fustagno vel de bombasio, et parpaglonem unum de canaveza. In medio habet majorem et dolonum de bombasio.”—t. ii. p. 434.

Here we find the artemon at the prow (proda). The dolon is not, as generally supposed, confined to the prow, as we find one “in medio,” on the middle or mainmast.

This is confirmed by certain contracts, entered into by the Genoese, to provide ships for Louis IX. In one of these, given by Jal (ii. 388), they are bound to supply two ships, each to have—

“Arborem unam de prorra (*sic*) longitudinis cubitorum quinquaginta unius, grossitudinis palmorum tredecem minus quarta . . . item arborem unam de medio longitudinis cubitorum quadraginta septem . . . Item debet habere vela sex cotoni infra scriptarum mensurarum, videlicet, *pro artimono* cubitorum sexaginta sex . . . item velum unum de medio cubitorum quinquaginta octo.”

Here the artemon is the largest sail, and belongs to the largest mast, which is the *foremast*, “arbor de prora.”

According to Wetstein, there is in the "*Versio Syra Posterior*," on the margin, "*artemon est stipes in capite*," *i. e.* the mast at the head of the vessel; and in the ancient Scholia on Juvenal, in the passage in the 12th satire, where he describes the disabled state of the ship of Catullus.

"*Vestibus extensis et quod superaverat unum  
Velo prora suo.*"

The scholiast observes, "*Artemone solo velificaverunt.*" The *artemon* is not mentioned by Julius Pollux.

There is a passage in Isidore of Seville which would seem to imply that the name of the sail at the prow was *dolon*; and we are told by many writers that Pliny and Pollux give this sail the same name; but Pliny does not mention the *dolon* at all, and Pollux merely says that it is the smallest sail (*ὁ δὲ ἐλαττωὶν δολων*. — i. 91.). The meaning of the passage in Isidore depends on the punctuation. It is as follows: — "*Dolon est minimum velum et ad proram defixum. Artemo dirigendæ potius navis causa commendatum quam celeritate.*" — *Origines*, xix. 3. As it is pointed, this means that "the *dolon* is the smallest sail, and placed at the bow. The *artemon* rather for the purpose of directing the ship than for speed." I suspect, however, that it should be read thus — "The *dolon* is the smallest sail; and, placed at the bow, the *artemon* rather for directing the ship than for speed:" and that the

authority of Isidore **may** be added to the others, to show that it is the foresail. It is, at all events, not contradictory to that of the authors I have quoted. Isidore is, however, by no means high authority on such a subject.

According to etymologists\*, the word is derived from *απτω*, appendere, or *απτημα*, an appendage. Now, knowing as we do, that the ancients depended for speed upon one principal sail, an appendage or additional sail at the bow of the ship was required for the purpose of directing the vessel when in the act of putting about; for, although there could be no difficulty in bringing the ship's head to the wind with the great sail alone, a small sail at the bow would be indispensable for making her "pay off," that is, bringing her head round, otherwise she would acquire stern-way†, and thereby endanger the rudders, if not the ship itself.



The annexed figure of an African corn-ship, from the reverse of a coin of the emperor Commodus, appears to give a good idea of the relative size and position of the two principal sails.‡

\* See Calepenius, ad verb.

† If any of my readers have tried to heave a cutter to, with her square-sail set, they will understand this;—*haud inexpertus loquor*.

‡ Taken from a coin in the Museum at Avignon, by I. S.

I am inclined to think that the etymology is a correct one, as Vitruvius uses the word to denote the "leading block" in a system of pulleys. But this block forms no part of the purchase, but is a mere appendage used for the purpose of changing the direction of the force.

The sails were strengthened by bands of rope sewed across them; so that if one part was rent, the injury would be confined to one compartment. This mode of strengthening sails appears to have been continued till a late period, as we find it in one of the figures in Breydenbach.\*

In one of the coins of the emperor Commodus, representing a wheat ship, we have this mode of strengthening the sails clearly expressed.†



\* The modern practice of using canvass bands is, perhaps, no improvement on the ancient practice of using rope bands. A correspondent of the *Nautical Magazine* (1834, p. 87.), who signs himself Master of a British Merchant Ship, states, that in a long voyage his stock of spare canvass was expended, and he was forced to employ rope bands instead. This he found to answer perfectly well, and thinks it an improvement.

† Captain Smyth observes with regard to this coin, that it "was struck, A. D. 186, and it testifies the care of Commodus



The sail at the stern (ὁ κατοπιν) is called by Pollux, "epidromus" (ἐπιδρομος); and by Hesychius, "pharos, and the smallest" (φaron και ελασσον, art. ἐπιδρομον). Pliny also mentions that there was a sail at the stern, and we frequently see a mast there, as in the above figure; but I have seen no representation of one with a sail set upon it.

The next class of sails are the Suppara, or top-sails. Isidore describes them as having only one sheet\*, *i. e.* the rope which extends the foot of the sail, and named in Latin *pes veli* (Gr. *πους*) † This

in the frumentarean supply. He established a company of merchants, and a fleet for conveying corn from Africa to Rome, to guard against any misfortunes that might befall the ships which transported it from Egypt. As this was a good act, his inflated vanity on the occasion shall pass uncensured."—No. 294. of *Captain Smyth's Collection*, p. 161. of his Catalogue.

\* "Siparum, genus veli unum pedem habens, quo juvari navigia solent in navigatione quoties vis venti languescit; de quo Lucanus :—

‘ Summaque pandens

Suppara velorum perituras colligit auras.”

*Origines*, lib. xix. c. iii.

† Commentators and translators have no difficulty as to the meaning of *πους*, or *pes veli*, the rope which extends the lower corner of the sail to the side of the ship, Anglicè, "the sheet," but they are puzzled with *προπους*, or "propes." Bökh supposes it the lower end of the rope, or that which was fastened to the ship's side: "Untern Ende der Schote, und wurden am Schiffe befestigt."—*Urkunde*, p. 154. I can see no difficulty in the matter; all large square sails must have two ropes at each lower corner of the sail, one to draw it aft, and the other to draw it forward; the former is called the *sheet*, the latter the *tack*. Now *προπους*, or "propes," is obviously the *tack*, it

would imply that the sail was triangular, attached to a yard with the apex undermost. This seems so strange a mode of setting a triangular sail as to be almost incredible. It would appear, however, that in the middle ages such topsails were actually in use; for in an old collection of views in the Knights' Library, at Malta, printed about the beginning of the sixteenth century, there is one of "La Città di Trepani," with a topsail agreeing with the description of Isidore. I have not, however, seen any which belong to the classical period. There are, indeed, triangular topsails upon the ships in some of the coins of the Emperor Commodus; but the apex, instead of being the foot of the sail (*pes veli*), is the head, whilst the base of the triangle is extended on the main-yard. This, at least, is a ship-shape way of setting a sail, as no additional spars are required for it.

When we read of at least three tier of sails above each other, we must be certain that they had top-sail-yards. Montfaucon has given a figure of a coin of Nero, representing the port of Ostium (vol. iv. pl. 143.), in which one of the ships has top and top-gallant yards across; but the details of

would naturally be called the fore-sheet, but that is appropriated to the sheet of the foresail: with the ancients, both ropes were called *ποδες*, "sheets;" thus Aristotle, describing the shifting of a sail, says, *το δε προς την πρωραν ποδιαιον ποιησασμενοι εφιασιν* (*Mechan.* 8.), hence what the ancients called the fore-sheet is now called the tack.

his figures, at least those from coins, are not to be depended upon. I have a sulphur impression from the same type, from a coin in the British Museum, in fine condition, in which there is no appearance of yards above the great sail. But in one of the ancient paintings which illustrate a MS. of Homer, supposed of the fifth century, preserved in the Ambrosian Library, which was published at Rome, 1835, the ships are represented with topsail-yards across, with the sails furled on them. (Pl. 32.)

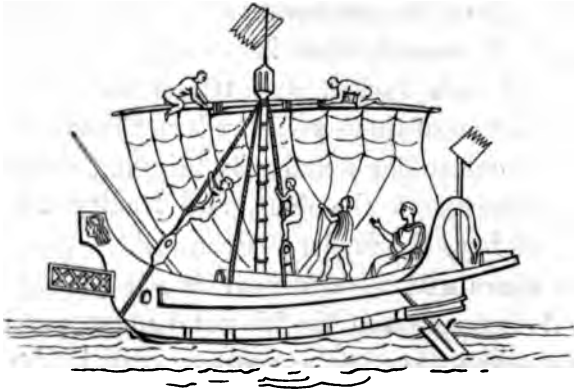
In addition to the three lower sails, and the suppara or topsails, we hear of Acatia and Dolones. The meaning of both terms has hitherto been misunderstood, — the acatium is not the mainsail, nor is the dolon the foresail. It is not, however, so easy to say what they were, as what they were not. We have sufficient proof that both the acatia and dolones were small sails. Now, small sails may be either set in addition to large sails in fine weather, or substituted for them in bad weather, — *i. e.* “storm sails.” It would appear from the passage from Xenophon (cited at p. 151.), that the former were substituted for the great sails: all we can learn with regard to the dolones is, that they were the small masts or sails in ships (*οἱ μικροὶ ἱστοὶ ἐν τοῖς πλοίοις*, Hesych. : *τα μικρὰ ἱστία*, Suidas). Suidas quotes a passage from Procopius, which shows that they also were occasionally substituted for the great sails: *χαλασάντες τὰ μεγάλα ἀρμενα τοῖς μικροῖς, ἃ δὴ δολῶνες καλοῦσιν, ἐπέσθαι*. I must say,

therefore, with Dindorf, “*Manemus igitur incerti.*” In one of the paintings from Herculaneum, representing a galley under sail, two triangular sails are seen attached to the main-yard, with the apices below.\* I suspect that in stormy weather the great sail was furled, and triangular sails substituted; two of these would reduce the sail to one half, and one to one fourth: by bringing down the fore yard-arm to the deck, and leading aft the sheet, we have the modern lateen sail.

The spars and wooden gear (*σκευη ξυλινη*) are, with the exception of the hinged rudder, precisely the same as we see in the coasting craft in the Roman states and Tuscany at the present day. They consisted of a strong and rather short mast, placed a little before the centre of the vessel. In the annexed figure, taken from the tomb of Nævoleia Tyche, at Pompeii, the mast is hooped, which would seem to indicate that it was built of several pieces. The foremast (*artimonium*) rakes over the bow, and the main-yard, which is fully as long as the vessel, is composed of two pieces, doubled in the centre, exactly as the lateen yards of large

\* Bökh supposes this a mistake, and that it is a square sail, with the middle drawn up (p. 141.). I can scarcely suppose that the engraver could have given the details, unless warranted by the original; he has represented “the ear-rings” or upper corners overlapping each other. After a century’s exposure, the original is much faded; it is in the Museo Borbonico at Naples, but, at such a height, I could not make out the details.

sails are at present; the main halyard block, which does not differ in any respect from that of the mo-

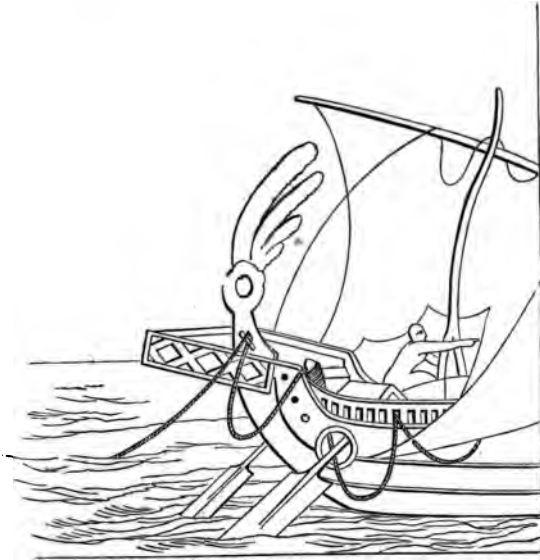


dern Italian craft, is formed by a large block of wood, not strapped, but at the upper end of it there is a hole, through which the pendant of the halyard is passed.

We have no means of knowing with accuracy the internal arrangements or manner in which the decks were laid with respect to breaks or hatchways; in the ship of Theseus we observe a break in the decks at the poop. Lucian mentions cabins near the stern in the Alexandrian ship, which he describes in his dialogue of the ship. In the annexed figure, taken from the *Antichità di Ercolano* (tom. ii. pl. xiv.), we see the roof of one of these cabins (*οικησεις*).

This is an interesting fragment, because the artist, although evidently quite ignorant of the

details, must have had an accurate prototype to copy from. The subject is Theseus abandoning



Ariadne\*; in order to give it the air of rude antiquity, the mast is formed by the trunk of a tree inverted, a rope, thrown carelessly over the yard, is seen to pass between it and the sail, which the wind blows in one direction, whilst it fills the sail in another; another rope passes between the sail and the bolt-rope, and the feather ornament at the stern is absurdly exaggerated. In spite of all these blunders, this is, perhaps, the most instructive representation of an ancient ship which has been preserved; and, when we remember that it was painted

\* I was unable to discover the original when at Naples.

within sight of the port to which the Alexandrian wheat ships resorted, and probably at the time when St. Paul's ship was in existence, we are warranted in supposing that many of the details agree with the class of ships to which she belonged. In the account of the voyage, I have referred to this painting for evidence to prove that the ships of the ancients were fitted for anchoring by the stern as well as to show the manner in which it was done. The rudders, in such a case, were necessarily lifted out of the water, or unshipped; in either case, the rudder-port, or rudder-case, served the purpose of a hawse hole. In the ship of St. Paul we know that the rudders were secured.

In a vignette to the splendid copy of Virgil, printed at Rome 1761, we have the figure of a ship, anchored by the stern, taken from an ancient marble. In this case the rudders are unshipped; the cable is passed through the rudder-case, and is seen within board, coiled round a windlass.

We have ample evidence, therefore, to prove that the ships were fitted for this manner of anchoring. I have already stated the reasons why it was put in practice in the case of St. Paul's ship. The success with which it was done, under circumstances of no ordinary difficulty, affords convincing proof of the superiority of the ancients in this important branch of seamanship. The anchors differed but little from those of the present day, except that they do not appear to have had palms, or triangular plates

of iron (flukes) attached to the extremities of the arms. It is by no means certain that this addition increases the holding powers of anchors. The Dutch anchors, which have no palms, but merely the extremities of the arms flattened, are known to hold remarkably well.\* The following extract from a recent newspaper† is interesting both in an anti-quarian and geological view, and shows that Ovid was quite correct in referring to anchors for proofs of geological changes:—

“A few days ago, as some parties were employed in trenching a piece of moss on a hill in the vicinity of Kishorn, Loch-carron, some miles from the sea, they found the stock and flues of a rudely-constructed anchor situated between the moss and a substratum of clay. The part which appeared to have been imbedded in the clay was wholly eaten away, and only distinguished by a rusty outline; that which lay in the moss only remains. The stock is furnished with an inside and outside ring, and must have been used according to some method now unknown. The flukes are sharp at the ends, somewhat like the blade of a pen-knife, and the very nature of the metal seems changed into a substance more resembling lead than iron.”

In the above description the *stock* is evidently mistaken for the *shank*: the two rings are very often seen in ancient anchors, in fact the description corresponds exactly with the anchors of the Romans. Modern writers *de re nautica* tell us that

\* Rodger's patent, which have very small palms, or rather none, but the extremities of the arms flattened and barbed, have also great powers of holding, as I can testify from experiments I witnessed near Portsmouth.

† Glasgow Courier, 8th Aug. 1846.





In the Knights, an informer accuses a person of stealing the “zomeumata” (ζωμευματα) of the Peloponesian galleys\*, an intentional misnomer for hypozomata (υποζωματα); “and the question is, What were the hypozomata?” The explanation given by the scholiast is that they were the timbers (τα ξυλα) of ships. Scheffer, Le Roy and Bloomfield contend that they were of wood. According to Scheffer, the hypozomata were the wooden bends (ζωστηρες), or belts, which encircle the ship externally. Le Roy supposes they were the decks†, and Bloomfield wooden stays to be applied internally.‡ It is not now necessary to discuss these explanations, because we learn from the Attic Tables, an authority quite conclusive in this case, that the hypozomata did not form part of the wooden gear (σκευη ξυλινη). What, then, were they? In the first place, they were external, as the name implies, “under zones.” Plato, in his legend of the Vision of Eros, compares the most distant starry zone to the hypozomata of galleys, binding the whole together.§ It is probable that ships were

\* Τουτονι τον ανδρ' εγω δεικνυμι, και φημ' εξαγειν  
ταισι Πελοποννησιων τριηρεσι ζωμευματα.

Ἰππεις, v. 278.

† Le Roy translates the Hypozomata of the ship of Ptolemy Philopater, “Il avoit douze ponts ou étages!”—*Hist. de l'Acad. des Inscriptions*, tom. xxxviii. p. 589.

‡ Note upon text. Taylor also, the translator of Plato, renders them the “transverse beams of ships.”—Vol. i. p. 471.

§ De Republic. c. 10. Και ιδειν αυτοθι κατα μεσον το φως εκ

occasionally undergirded with wooden planks; but this could only be done in harbour. In the Louvre there is a statue of a marine goddess standing upon a galley, upon the sides of which planks are seen placed vertically. Polybius talks of ships being "undergirded"\* before putting to sea, evidently meaning that they were to be repaired in a temporary manner; but this can have no reference to the "helps," which were carried with the ships for the purpose of being applied at sea, when required, which were necessarily flexible. Isidore of Seville mentions "the mitra" as a *cable* by which a ship is bound round the middle.† Hesychius says, also, that they were "cables binding ships round the middle."‡

The next question to be considered is, How were they applied? One would have thought this easily

του ουρανου τα ακρα αυτου των δεσμων τεταμενα· ειναι γαρ τουτο το φως ξυνδεσμον του ουρανου, οιον τα υποζωματα των τριηρων αυτου πασαν ξυνεχον την περιφοραν.

\* ναυς συνξουλευσας τοις ῥοδιοις υποζωννυειν. — Leg. 64. This mode of strengthening old ships is still in use. The Rainha, an old Portuguese line of battle ship, was very successfully fitted with external braces and girders, and sent to sea during the late civil wars:

† "Mitra, funis qua navis media vincitur."—*Orig.* lib. xix. c. 4.

‡ Ζωμενυματα, υποζωματα σχοινια κατα μεσον την ναυν δεσμευομενα.

Scheffer refers to "Boysii Roma Subterranea" for a figure of the application of the hypozomata. I searched through the work twice, but could not discover it; Bökh makes the same remark (p. 135.).

answered, — that the hypozomata should be bound round the middle of the ship, at right angles to the length, and not parallel to it. As, however, Bökh endeavours to prove that they were applied lengthways\*, and as this view is adopted by others, — see Smith's Dictionary of Greek and Roman Antiquities (p. 880.), — it is necessary to examine their arguments. Bökh, in the first place, quotes a passage in Vitruvius, who describes certain ropes as being attached to the beam of a battering ram in the same manner as “a ship is kept from head to stern.” “Quemadmodum navis a puppi ad proram continetur.” After searching for the passage, which is erroneously quoted†, I found that the important word “malus,” mast, was omitted, and that the meaning was, that the ropes were attached to the beam in the same way as the standing rigging was attached to the mast. The next quotation is from Isidore, and is more to the purpose, because it does appear that ropes were occasionally applied in a longitudinal as well as in a transverse direction, to prevent ships from straining. “The tormentum is a cable in *long* ships, which is ex-

\* Urkunden, p. 134.<sup>a</sup>

† Erroneously quoted, in both the works referred to, as x. 15. 6., in place of x. 21. This is one of the annoyances to which a person determined to examine authorities for himself is subjected to; but a proof of the necessity of the task. The passage is as follows: “A capite autem ad imam calcem tigni contenti fuerent funes quatuor, crassitudini digitorum octo, ita religati quemadmodum *malus* navis a puppi ad proram continetur.”

tended from stem to stern, in order to bind them together." \*

Isidore mentions two kinds of cables for the purpose,— the mitra, to bind them round the middle, and the tormentum: this, he says, is so called because it is twisted. There is nothing which implies that it was passed round the ship externally, and it is not clear how a ship could be bound together in the mode supposed,— the “naves longæ;” from the weight of the rostra and towers at the extremities, and from their great length, must have been extremely apt to “hog,” or fall down at each end; but as the stem and stern posts rose above the rest of the vessel, a simple way of preventing this would be to pass a rope round them, and heave a strain upon it by twisting the parts together, as was done in the military engines called tormenta; and Isidore’s etymology of the name “tormenta, a tortu dicta,” seems to confirm this. Bökh also notices the hypozomata of the great ship of Ptolemy Philopator. I agree with him that the word *ελαμβανε* (took) shews that they were not fixed to the ship; but I do not see anything in the account of Athenæus to prove that they were meant to be applied lengthways, and still less that this was the only mode.

The last proof which he adduces in favour of

\* “Tormentum, funis in navibus longis quo prora ad puppim extenditur quo magis constringantur, tormentum autem a tortu dicta.”—*Orig.* xix. 4.

this hypothesis, is taken from a bronze relief in the public museum at Berlin. It is figured in the *Thesaurus Brandenburgicus* of Beger (vol. iii. p. 406.), and in Montfaucon.\* I have not seen the original bronze, but the figures do not warrant the inference. The rope mouldings are evidently ornamental, and three out of the four do not go round the vessel, but are interrupted by the stem-post. The Victoria and Albert royal yacht has also a rope moulding exactly where the antique has it; it would scarcely be a fair inference to suppose that it was meant to hold a crazy vessel from falling to pieces. I cannot, therefore, see any reason for supposing that ships were undergirded lengthways, a mode which must have been as impracticable as it would have been unavailing for the purpose of strengthening the ship. It would appear from the Attic tables that the hypozomata formed a regular part of the gear of every ship, and that they were laid up in the magazines.

In the account of St. Paul's Voyage, I have adduced examples to show that the practice of undergirding ships is still occasionally resorted to.

I have only a few remarks to offer on the capabilities of the antient ships in working to windward. Paul Hoste has observed that no person could infer *a priori* that a vessel impelled by the wind could sail to a place, which in respect to that

\* *Antiquité expliquée*, tom. iv. pt. 2, p. 214. pl. cxxxiv.

from which it started, was directly to windward. This may be true, but on the other hand no person who tried to impel a vessel by sails could avoid making the discovery, for in the most unfavourable supposition, that of a sail set at right angles to the keel, it would be discovered that even though the wind did not blow directly upon it, so long as the sail was full, the vessel would go a-head; and of course, if the yard could be braced, that she could go nearer to the wind than at right angles to it, or within eight points. We have no information as to the exact angle with the wind which an antient ship could sail. It must, however, have been less than eight points, but more than six, the usual allowance for a modern merchant-ship, in moderate weather. I have, therefore, in my calculations taken seven as the mean between these extremes, and I cannot suppose it would be much greater or less.

Notwithstanding the imperfect manner in which the ships were rigged, they appear frequently to have made excellent passages. Pliny has enumerated several which would be considered respectable in modern times. Thus he tells us that the prefects, Galerius and Babilus, made quick passages from the Straits of Messina to Alexandria; the former arrived on the seventh, the latter on the sixth day; that, in the following summer Valerius Marianus made the passage from Puteoli, on the ninth day, "*lenissimo flatu*:" he also mentions passages

from the Straits of Hercules to Ostia, in seven days; from the nearest port of Spain, in four; from the province of Narbonne, in three; and from Africa, in two.\* Upon these passages Captain Beechey offers the following remarks: —

“ It does not appear that there is any mistake in the numbers here mentioned by Pliny; for the instances are all of them consistent with each other, one only being below 140 M. P. per day, and another 143; two examples afford 160; two 175, and 185. The lowest of these rates of sailing may be reckoned at between six and seven M. P. per hour, and the highest at something less than eight; giving a mean of seven M. P. per hour, which would be reckoned a good one for ships of the present day.”—*Appendix to Trav. in Africa*, p. xxxviii.

The most rapid run which I have met with is mentioned by Arrian, in his *Periplus of the Euxine* (p. 5.), who stated that “ they got under weigh about daybreak,” *αφαντες μιν ὑπο την εω*; and that by mid-day they had come more than 500 stadia, *και ηλθομεν προ της μεσημβριας σταδιους πλειονας η πεντακοσιους*, that is, more than fifty geographical miles, which is at least eight miles an hour.

Major Rennel, in his *Observations on the Geography of Herodotus* (p. 678.), supposes that the average rate of a day's sail was only thirty-seven miles. Vessels navigating unknown coasts, such as those of Africa were when Herodotus wrote, and putting into port at night, may not have made more in a day; and it would be no objection to the

\* Hist. Nat. Proœm. ad lib. xix.



credibility of a narrative were this stated to be the case: but it is absolutely impossible that ships four times as long as they were broad, with a large square sail, could make so little progress with a fair wind; and the foregoing examples prove that they did not. When St. Luke states that the ship sailed from Rhegium on one day and arrived at Puteoli on the following, he tells us that the wind was south (xxviii. 13.). Now, as the course is nearly due north, the vessel was running right before the wind, which to a single-masted vessel is the most favourable point of sailing. The distance is about 182 miles. If we suppose she sailed at the rate of seven miles an hour—the mean of the foregoing examples, the time consumed would be about twenty-six hours, which agrees perfectly with St. Luke's account.

The passage, therefore, from Rhegium to Puteoli, which terminated on the day following that upon which they left it, although a quick one, was by no means unprecedented.

We are apt to consider the antients as timid and unskilful sailors, afraid to venture out of sight of land, or to make long voyages in winter. I can see no evidence that this was the case; the cause of their not making voyages after the end of summer arose, in a great measure, from the comparative obscurity of the sky during the winter, and not from the gales which prevail at that season. With no means of directing their course, except by

observing the heavenly bodies, they were necessarily prevented from putting to sea when they could not depend upon their being visible.

In what manner they calculated the distance, as well as the direction of their course, is uncertain. Vitruvius describes what may be termed a perpetual log; that is, a mode of estimating the distance passed over by the revolutions of a wheel (x. 14.). From the manner in which he speaks of it, it appears rather to be a scheme which might be adopted, or the tradition of one which had been in use, than the description of an instrument actually in use. The wheels were, or supposed to be, fixed to the sides of the ships. It appears to be one of those plans that look well in theory; but which the disturbing causes, arising from the inclination of the vessel or the violence of the sea, would render of no value.

The internal arrangement of the rowers in the war galleys of the antients is a problem of great difficulty, as to the true solution of which much difference of opinion exists. No work expressly describing the arrangement is extant, and it is one not well fitted for graphic representation. The incidental notices of antient writers, and the representations on coins, marbles, bronzes, and pictures, however, in a great degree limit the problem, and as appears to me, when combined with the essential condition of practicability, lead us to the true solution.

I shall, in the first place, notice the solutions which have been proposed by other writers.

M. Jal, the latest writer on the subject, cuts the knot, by disbelieving the possibility of three ranks being placed one above the other. Speaking of the figures on Trajan's column he says —

“ La colonne représente des navires à trois rangs de rames superposés et d'autres à deux rangs. Pour les birèmes, bien qu'elles soient mal rendues, pas de difficulté : j'admets les birèmes ; le texte des *Tactiques* de l'empereur Léon est trop clair, trop positif pour me laisser un doute. Quant aux trirèmes, c'est différent. La longueur de la rame supérieure aurait dû être telle qu'il n'y a ni bois assez long pour la faire, ni bras assez forts pour la mouvoir.” — *Archæol. Nav.* i. 34.

M. Jal in this passage apparently proceeds upon the assumption that the calculations of Lescallier, the author of *Vocabulaire des Termes de Marine*, are correct. That author supposes that the lower oars were 44 feet long, and that each rank of oars was separated by a deck, like the tiers of guns in a line of battle ship, both of which suppositions are in direct opposition to the evidence which has come down to us. According to his calculation, the oars of the second rank must have been 77 feet in length, of the third 110 feet, &c. Such oars could not be pulled by one man ; but it is clear from the description of the bireme, given by the Emperor Leo, which M. Jal admits as authority, that there was only one rower to each oar. According to the emperor, there were two ranks, one above and one below, seated upon benches, of which there

were twenty five above and as many below—fifty in all. Upon each bench were seated two rowers — *one* upon the right side, and *one* upon the left, so that in all, both rowers and soldiers, above and below, there were a hundred men.\* With regard to the triremes there is no point better established than this, that their oars were pulled by one man each, and the late discovery of the Attic tables proves that the longest oars in this class of vessels did not exceed in length those of an ordinary row boat of the present day. (I. 9. 14. &c.)

De Baif and others suppose that the ranks were not placed directly one above and overlapping the other, but that the thranites or highest rank were placed at the stern; that the zygites were placed in the middle of the ship, lower than the thranites; and the thalamites at the bow, and lower than the zygites.

The only authority which is cited for this arrangement is a passage in the antient scholia on the

\* Εχων μεν τας λεγομενας ελασιαις δυο, την τε κατω, την ανω, εκαστη δε εχετω ζυγους, το ελαχιστον πεντε και εικοσι, εν οἷς οἱ κωπηλαται καθεσθησονται, ως ειναι ζυγους τους απαντας, κατω μεν εικοσι και πεντε, ανω δε ομοιως εικοσι και πεντε, ομου πεντηκοντα, καθ' ενα δε αυτων δυο καθεζεσθωσαν οἱ κωπηλατουντες εἰς μεν δεξια εἰς δε αριστερα, ως ειναι τους απαντας κωπηλατας ομου και τους αυτους και στρατιωτας τους τε ανω και τους κατω ανδρες εκατον.—*Tactica, Meursii Opera*, t. vi. 829. It has been doubted whether this description applies to the war galleys of the period when Leo wrote (ninth century), but it is evident that it did, for they were fitted with a siphon (σιφωνα κατα την πρωραν) for darting Greek fire.

Ranæ of Aristophanes which is to the following effect:—

“Thalamax, one who rows in the lower part of the trireme. The thalamaces receive low pay on account of their using short oars compared with the other three ranks of oars, because they are nearer the water. There were three ranks of rowers; the lowest rank were called thalamites, the middle zygités, and the upper thranites. The thranite, then, is placed towards the stern, the zygité in the middle, and the thalamite towards the bow.”\*

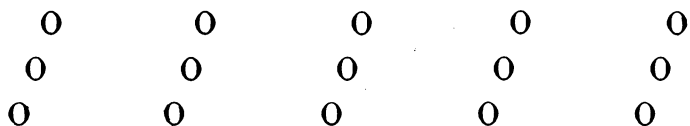
This passage has always been understood, both by those who with De Baif suppose that the three classes of rowers were placed as last mentioned, and by those who suppose that they were placed directly one above the other, to mean that the thranites as a body were placed at the stern of the ship, the zygités as a body in the middle of the ship, and the thalamites as a body next the bow; and those who suppose that the ranks were placed directly one above the other, accuse the scholiast of having committed a blunder. But were such the meaning of the scholiast, the last part of the passage would be alike inconsistent with the first, and with the jest, such as it is, which it is meant to illustrate. The words thranite, zygité, and thalamite, in the

\* Θαλαμακι τῇ κωπηλατοῦντι ἐν τῇ κατῷ μέρει τῆς τριήρους. οἱ δὲ θαλαμακες ὀλίγον ἐλάβανον μισθόν, διὰ τὸ κολοβαῖς χρῆσθαι κωπαῖς παρὰ τὰς ἄλλας τρεῖς τάξεις τῶν ἐρετμῶν, ὅτι μαλλὸν ἐγγὺς ἐστὶ τοῦ ὕδατος. ἦσαν δὲ τρεῖς τῶν ἐρετμῶν. καὶ ἡ μὲν κατῷ θαλαμῖται, ἡ δὲ μέσῃ ζυγῖται, ἡ δὲ ἀνω θρανῖται. Θρανίτης οὖν ὁ πρὸς τὴν πρυμνὴν, ζυγίτης ὁ μέσος, θαλαμίτης ὁ πρὸς τὴν πρῶραν.  
— *Schol. ad Ranæ*, v. 1074.

last part of the passage, are in the singular; and the true meaning of the passage appears to me to be that each thranite was placed nearer the stern than, and therefore in front of and above, a zygite; and each thalamite nearer the bow than, and therefore behind and below, a zygite and a thranite. This mode of arrangement is actually figured on a coin of Adrian, of which I have given an engraving on a subsequent page, and by this construction the passage from the scholiast becomes sensible and an authority for an arrangement different from that in support of which it has been cited.

General Melville supposes that the sides of the galleys formed an angle of  $45^\circ$  with the water.\* Such an over-hang would admit of several ranks of rowers, without adding much to the height of the vessels; but it would be destructive of their stability, and is unsupported by evidence.

The most general explanation given is, that the oar-ports were arranged diagonally in echelons along the sides of the vessel thus:—

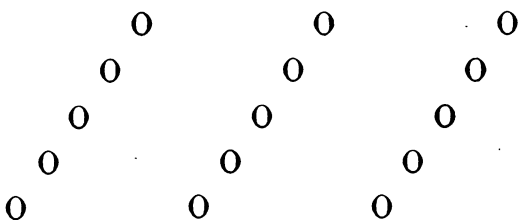


Isaac Vossius† and others estimate the rate of the ship from the number of oars in each echelon.

\* Pownall on the Study of Antiquities, p. 119., and Appendix, 235.

† De Triremium Constructione.

According to him, a ship with oar-ports arranged as above would be a trireme. Mr. Howel \* adopts the same arrangement, but estimates the vessel's rate from the number of echelons. According to him the above figure represents a portion of the oar-ports of a quinquereme. The oar-ports of a trireme he supposes to have been arranged in the following manner:—



But this mode of arrangement is unsupported by any antient authority, and would not admit of the number of oars which we know triremes carried; some of them, as we learn from the Attic tables, having 170. (Bökh, *Urkunden*, p. 119.)

The arrangement of the oar-ports, according to Vossius, does not differ materially from what I conceive to have been the true arrangement, except as to their mutual distances. His internal arrangement of the rowers makes it necessary to suppose that the distance between two oar-ports of the same rank was seven feet, even allowing scanty room for the rowers. This distance between the oar-ports would not admit the requisite number of oars. A

\* *Essay on the War Galleys of the Antients.* Edin. 1826.

trireme carrying 170 oars must, on this arrangement, have been considerably more than 200 feet long, a length which is quite out of the question.

It will be convenient, before I offer any conjectures of my own, to state what are the well-established facts respecting the mode by which the antient galleys were impelled by oars. They are—

1st. The oars were ranged in horizontal tiers; those in each tier being so near each other as just to admit of the rowers pulling without interfering with those immediately before and behind them. This appears to me to be evident from every representation which has come down to us, and is confirmed by a passage in Vitruvius, who calls the interscalmum, or space on the ship's side between the oar-ports, διπηχαικη, or two cubits length (*navibus interscalmio quod διπηχαικη dicitur, i. 2.*). Now two cubits, or three feet, is the smallest space which will allow rowers in the same rank to pull with facility.

2d. That the ranks were arranged one directly above the other, the vertical distance of two adjoining ranks not being more than one-half of the distance of the two adjoining oar-ports of the same rank. On this point all the representations agree.

3d. The oars, at least in the triremes and all below that rate, were pulled by one man, this is proved by the extracts of the Emperor Leo's work, already quoted; by the account given by Thucydides of the night march of the Peloponnesians, in



which each man carried his oar (see note, Appendix, No. 4.); and by the dimensions of the spare oars, given in the inventories of the Attic navy, none of which are more than  $9\frac{1}{2}$  cubits, or 14 feet 3 inches. (Bökh, Urkunden, p. 123.)

4th. The fighting-men, *epibatæ*, pulled, when not engaged in combat, on platforms or gangways laid along the sides of the vessels.

Having premised these established facts, I shall now proceed to explain what I conceive to have been the arrangement of the rowers in the trireme, showing the considerations by which I have been guided, and comparing the result with the notices in antient writers, and with antient representations which have come down to us.

The row-boats to which we are accustomed, have only one rank of rowers. Such boats are not adapted for the antient mode of fighting at close quarters. The oars would impede the free motion of the soldiers on the decks. To allow of this, a platform or gangway must be laid above the oars and along each side of the vessel. This may be a complete deck, in which case it must be higher than the heads of the rowers; or it may only extend a short distance from the side, not covering the rowers, in which case the height need only be such as to allow free motion to the handles of the oars; or it may partly or wholly project over the side of the vessel, in which case it need be a very little higher than the row-locks. That the war-

galleys of the antients must have had such gangways we might have inferred from the necessity of the case; but it also distinctly appears from antient coins, pictures, and models.\*

From these it appears that the gangways generally projected to some distance over the side of the vessel. In combat this gangway or platform must have been cleared of oars; but this was the exceptional case. When not actually engaged in combat, the gangways were disposable for the purpose of rowing; and if oars were placed so as to dip into the water in the intervals between the oars of the men below, they would not interfere with those; and here again we might have inferred, independently of antient authorities, what is however amply confirmed by them, that when the ships were not engaged in combat, and particularly when speed was of vital consequence, as in pursuit or flight, there was a second tier of oars pulled from the

\* Montfaucon has given a representation of a naval combat (vol. iv. pl. 142.), copied from a marble at Seville, in which soldiers are seen fighting from the gangways. Winkelman, in his *Antichite Inédite* (vol. ii. fig. 207.), has figured a trireme in action, the soldiers engaged in combat, with two ranks of oars pulling below. In Smith's *Dictionary of Greek and Roman Antiquities*, one of the galleys from Montfaucon and the galley from Winkelman are figured (p. 877.). In Piranesi's great work on antient vases, marbles, &c. (vol. i.), will be found a large and accurate representation of the galley first figured by Winkelman; it is now in the Vatican. In the coins of Adrian, figured p. 193., the upper ranks are seen pulling from the gangways.

gangways. Thus, then, we arrive at the conclusion, almost independently of antient authorities, that war galleys must have been fitted to row with at least two tiers of oars; the upper tier, or *thranites*, being employed in rowing when not engaged in combat; the lower row, or *zygites*, rowing at all times.

In the case we have supposed, each *thranite* is placed above, and nearer the side of the vessel than the corresponding *zygite*. It will, however, be easily seen that two tiers of oars may approach still nearer to each other, when the rowers in the lower tier are nearer the side of the vessel than those in the upper tier. They may then be placed so that the handle of an oar of the upper tier may work as it were in the lap of a rower of the lower tier; and as the oars are moved in the same direction in the same time, a comparatively small vertical and horizontal distance of the row-locks will keep the handle of the oar of the rower of the upper tier from striking the hand of the rower of the lower tier who is behind him, or the head or back of the rower of the lower tier who is before him. Thus, then, a third tier of rowers, the *thalamites*, may be added at a very small distance below the *zygites*; and if the *zygites* are supposed to sit on benches placed on the deck, and the *thalamites* on the deck itself, the height of the vessel would not be increased by the introduction of the *thalamites*.

The *thalamites* will be placed immediately under

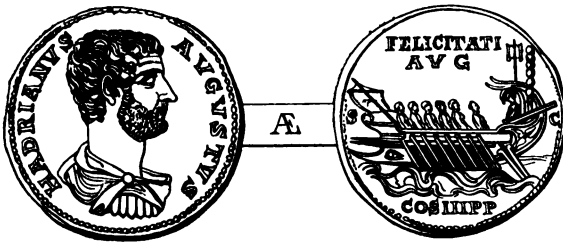
the thranites, but covered by the platform or gangway, on which the thranites sit. These ranks do not therefore interfere with each other within the vessel; and if the oar-ports are so placed that the oars of one rank dip into the water in the intervals between the oars of the other, they will not interfere externally.

Of the practicability of this arrangement I satisfied myself by actual trial. I cut two oar-ports to represent the row-locks of the zygites, at a distance of 3 feet 6 inches from centre to centre, which is the distance allowed in launches of a man-of-war which are pulled "double banked," or with two rowers on each bench, as in the antient galleys; and I found that by cutting an oar-port 14 inches below those of the upper tier, and at about one-third of their horizontal distance, reckoning from stern to bow, a rower seated on the deck, and rowing in the lower oar-port, was not interfered with by rowers seated on benches nearer the centre of the vessel, and rowing in the upper oar-ports. It was unnecessary to make a similar experiment with regard to the thranites. Sitting on the gangway they could not interfere internally with the zygites or thalamites; and in order that they should not interfere externally, it would only be necessary that the horizontal distance of the oar-port of a thranite from the oar-port of the zygite next before him, should be two-thirds of the distance between two consecutive oar-ports of the zygites.

Such, then, I suppose to have been the arrangement of the rowers in a trireme, which I shall shortly recapitulate. The thalamite I suppose to have sat on the deck, not far from the side of the vessel, and to have rowed in an oar-port little higher than the deck, and probably little more than two feet above the water; and the distance between two successive oar-ports of the same tier, I suppose to have been about 3 feet 6 inches. About 14 inches nearer the stern, and about 14 inches higher than the oar-port of a thalamite, was the oar-port of a zygite, who sat on a bench or stool placed on the deck, on the inner side of the thalamite, about 14 inches in front of his seat, and whose oar worked in the angle made by the body and legs of the thalamite. Immediately over the heads of the thalamites a platform extended from the side of the vessel, probably not extending so far inwards as the zygites, but reaching to their shoulders; and this platform projected a short distance over the side of the vessel. On this platform the thranites sat and rowed. Their oar-ports were arranged along the outer edge of the platform, each oar-port being about 14 inches nearer the stern than the nearest oar-port of a zygite, and 14 inches nearer the bow than the nearest oar-port of a thalamite, and being about 3 feet higher from the water than the oar-ports of the thalamites and 1 foot 9 inches higher than the oar-ports of the zygites. The highest oar-port was, therefore, pro-

bably not more than 5 feet above the water; a height not too great for the use of the oars mentioned in the Attic tables, viz. 9 or  $9\frac{1}{2}$  cubits, or about 14 feet.\*

The general external agreement of the arrangement I have supposed with that of antient ships,

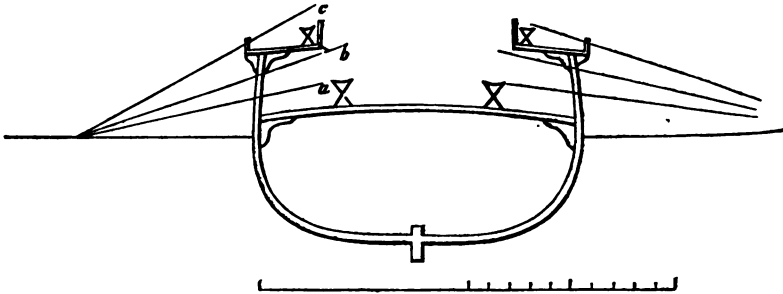


will appear from the annexed engravings of two coins of the Emperor Hadrian. One represents a bireme; the other, a trireme.



\* Mitford cites the bouanga of the Philippine Islands, described by Pagés (*Voyages*, i. 169.), as a case in point of an existing trireme; but as the bouanga has an outrigger upon which rowers are seated, it may be called a double vessel. The main body of the vessel is a bireme, with a tier of oars pulled from a projecting bamboo gallery. The corcore of the Mo-

We have no similar means of testing what I have supposed to be the internal arrangement; and I shall, therefore, examine some of the passages in antient authors which most directly bear on this point; and to assist my readers in this examination, I annex a diagram drawn to a scale, of the transverse section of a trireme; the oars on one side dipping into the water, the oars on the other side lifted out of it.



*a*, oar of thalamite seated on deck. *b*, oar of zygitte seated on stool on deck. *c*, oar of thranite seated on stool on gangway.

It will be observed that I have represented the oars of the different tiers as dipping into the water at the same distance from the side of the vessel, and the middle oar, that pulled by the zygitte, to be the longest. This appears to have been the case from several passages in antient authors. Galen says, speaking of the human hand, that, although

luccas is, however, a regular bireme, not depending on an outrigger for stability, (in which the upper or outer oars are pulled from a projecting gallery). Freycinet, *Voyage*, ii. 11. pl. 37.

the fingers are of unequal length; yet, when the hand is shut, their extremities come together, "just as in triremes the ends of the oars extend to an equal distance, although they are not all of equal length, but in that case also the middle ones are longest." \*

It is only necessary to look at the diagram to see that the comparison is by no means a far-fetched one. Aristotle, also, observes, that "the middle finger, like the middle oar, is the longest." † The longest oars, in the above diagram, are of the length indicated in the Attic tables.

I am aware that Professor Bökh, who is high authority in matters of Grecian antiquity, differs from the explanation I have given of the passages from Aristotle and Galen, and supposes that the "middle oars," which these authors said were the longest, were in the middle of the vessel with respect to length, and not with respect to height, and supports this construction of the passages by an entry in one of the Attic tables (ii. 56. Urkunde, p. 288.), from which it appears that out of forty-eight damaged thranitic oars, ten might serve

\* Καθαπερ οἰμαι κἀν ταῖς τριηρεσι τὰ πειράτα τῶν κωπῶν εἰς ἴσον ἐξικνεῖται, τοὶ γ' οὐκ ἰσῶν ἀπασῶν οὐσῶν, καὶ γὰρ οὐν κἀκεῖ τας μεσας μεγαίστας. — Galen, De Usu Partium Corporis Humani, lib. i. cap. 24.

† Καὶ ὁ μεσος μακρος, ὥσπερ κωπη μεσονεως. — De Partibus Animalium, iv. 10.



as zygitic, implying that the thranitic oars were at least as long as the zygitic. It may, indeed be true that the oars in the centre of the vessel were longer than those near the bow and stern, and we may perhaps thus explain the passage in the Attic tables; for it might well be that the longer of the thranitic oars might serve for the shorter of the zygitic; but the difference of adjoining oars of the same rank must have been imperceptible, and could scarcely have suggested the comparison of Galen.

Eustathius tells us that the thalamites rowed under the thranites.\* Julius Pollux tells us that the part of the ship where the thalamites rowed, was called the thalamus.† A glance at the foregoing diagram will explain the propriety of the appellation; it is the only part of deck sheltered from the weather. He also tells us that the middle of the ship was called zyga, or the beams, where the zygitēs sat; and that the seat round the gangways or platform(καταστρωμα‡) was called thranos, where the thranites sat.

I shall now consider whether this mode of ar-

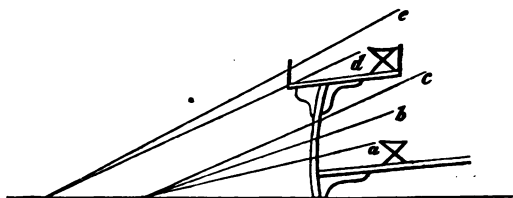
\* Ὅθεν μεταφορικῶς καὶ θαλαμίται καὶ θαλαμακες ἐρεται οἱ ὑπο τοὺς θρανίτας.

† Καλοῖτο δ' αὖ καὶ θαλαμος, οὗ οἱ θαλαμιοὶ ἐρετουν· τὰ δὲ μέσα τῆς νεὼς ζυγα, οὗ οἱ ζυγιοὶ καθήνται· τὸ δὲ περὶ τὸ καταστρώμα θρανός, οὗ οἱ θρανίται.—Julius Pollux, lib. i. 87.

‡ “Καταστρώμα, tabulatum quo navis superiore ex parte striata est, quodque nautas discurrentes aut milites propugnantes sustinet.”—*Scapula*.

rangement could be extended beyond three tiers of oars. The antients, we know, had quinqueremes, or galleys with five banks of oars. Of these we have no graphical representations, and are left still more to conjecture than in the case of triremes. The quinquereme must, of course, have been larger than the trireme. A vessel twice the size of another, if the proportions are the same, is one-fourth larger in every dimension. If the height of the gangway of the one is 5 feet above the water, the gangway of the other will be 6 feet 3 inches. If the deck remains at the same height as before above the water, the additional height of the gangway will allow space for an additional tier of oars under the gangways, the oar-ports of which must be placed in the same position relatively to the oar-ports of the zygites, as the latter are relatively to the oar-ports of the thalamites. This third rank of rowers must be placed nearer the middle of the vessel than the zygites, either standing on the deck or sitting on seats more elevated than those of the zygites. But the oars of this third rank of rowers would interfere externally with the oars of the thranites, if these remained as before. This may be remedied by increasing the length of the oars of the thranites, or by making the gangway project further from the side of the vessel, so that the oars of the rowers on the gangways may always dip into the sea, outside of the oars of those who row below the gang-

ways.\* This being done, it will be evident that one or even two additional ranks of rowers may be placed on the gangways, without interfering with the other rowers, and we thus obtain a quinquereme or a sexireme. This arrangement of the oars of a quinquereme is shown in the annexed figure, which is drawn to a scale.



The longest oar in the case here represented is 20 feet, a length quite within the power of one man.†

I do not consider it necessary to inquire how far the mode of adding to the number of ranks can be carried. Meibomius‡, and after him Witsen§, have arranged the alternate ranks nearer and farther from the side, as I have done; but, instead of placing the upper rower, when there are three

\* Lucan notices the greater distance from the ship's side at which the oars struck the water in a sexireme:—

“Celsior at cunctis Bruti prætoria puppis  
Verberibus senis agitur, molemque profundo  
Invehit, et summis longe petit æquora remis.”

*Phars.* iii. 533.

† The sweeps used in decked boats are sometimes 22 feet long, and are pulled by one man.

‡ Meibomii de Fabrica Triremium, Amst. 1671, p. 1.

§ Aeloude en Hedendaegsche Scheeps-bouw en bestier. door N. Witsen, fol. Amst. 1671. Appendix, p. 4.

ranks, either upon a projecting gangway or nearest the middle of the ship, they place him next the side: hence, according to their representation, he is obliged to grasp his oar at one-twelfth of its length from the fulcrum; but no oar could be rowed in this manner.

I shall, now, offer a few remarks on the galley of Ptolemy Philopator, which, according to Plutarch\* and Athenæus†, had forty ranks of oars, and, according to Pliny‡, fifty. The dimensions given by the two former authors are the same; and as the account of Athenæus is the most particular, I shall offer some remarks upon it. It is said to have been 280 cubits, or 420 feet, in length; and 38 cubits, or 57 feet, in breadth. I see no impossibility in the size. The breadth is less than that of some of our line-of-battle ships. If we suppose that the length of the keel bore the same proportion to the extreme length, as in the *Sovereign of the Seas* already mentioned, her measurement would be about 4000 tons, or about one third more than our first rates. There is certainly nothing improbable in the supposition, that a despotic prince could construct such a vessel. Plutarch says that it was little better than an immovable building, more calculated for show than use. It was so constructed, that it could be moved with either end

\* Vita Demetrii.

† Lib. v. c. 37.

‡ Hist. Nat. lib. vii. c. 56.

first, having rudders and rostra at each end.\* The oars of the highest ranks were 38 cubits, or 57 feet,

\* The rostra are described as having seven beaks, one principal one in the centre, and three on each side, gradually shorter (*εμβολα εἶχεν ἑπτα, τούτων ἐν μὲν ἡγούμενον, τὰ δ' ὑποστελλοντα*). The two prows, two sterns, and four rudders of this ship have occasioned much needless perplexity to commentators and nautical antiquaries. M. Jal, who never believes what he does not understand, and is, it must be allowed, exceedingly sceptical in treating of antient ships, does not believe in the double prow, because the shocks of the sea in the re-entering angle would strain the ship and impede her sailing; nor in the seven beaks; nor in the length of the oars, 57 feet, when the height of the ship was 72. It does not appear to me that any of these points present difficulties. Athenæus does not say that the two prows were at the same end. The ship was evidently built so that she could move with either end first. M. Jal's own explanation of Tacitus is quite applicable to Athenæus:—"Ce vaisseau, qui a une proue à chacune de ses extrémités (utrimque), pour être toujours prêt à donner ou à recevoir l'abordage." (i. 122.) Such a vessel must have had four rudders, two at each end. Dion Cassius describes similar vessels fitted with rudders at each end, *ἐκατερωθεν καὶ ἐκ τῆς πρυμνῆς καὶ ἐκ τῆς πρῶρας πηδαλίοις ἡσκητο*, and states as the reason that they were so, that they did not require to be turned, *ὅπως αὐτοὶ μὴ ἀναστρεφομενοὶ, κ. τ. λ.* (ii. 1252.).

With regard to the rostra, that of every ship had a principal beak, and at least two shorter ones, one on each side:—

"Totumque dehiscit,

Convulsum remis rostrisque tridentibus, æquor."

*Æn.* 5. 142.

That a ship of this size and power should have three on each side, can excite no surprise. As to the height mentioned by Athenæus, it is to the top of the acrostoleum, or bow or stern ornament, which rose much above the other parts of the ship. M. Jal thinks it would take an hour to get such a ship round—a very sufficient reason for having her fitted so as not to require turning.

in length. These are certainly not very extraordinary dimensions — not longer than the sweeps used in our sloops of war, or formerly in the Maltese galleys. They are, however, obviously too large to be pulled by one man. If we deduct from the length of the oar what must have been in the inside of the vessel, which cannot be less than one-fourth, and allow at least 10 feet to be dipped in the water, such an oar could not be pulled with advantage, were the oar-ports more than 25 feet above the water. Now, it is obviously impossible to arrange forty tiers of oars above each other in this space, nor can we see what object would be gained by such an arrangement. I do not pretend to explain the meaning of the forty ranks here; but it does not follow that, because we cannot explain this particular case, we are to doubt the fact so clearly established by antient authorities respecting the arrangements of the galleys with fewer tiers of oars. It appears, from Athenæus, that the very large galleys had several gangways, one above the other: thus the great galley of Hiero, king of Syracuse, had three gangways (*τριπαροδος*), the lowest, the middle, and the upper one.\* I have shown that it is quite possible to arrange three ranks upon each deck or gangway. This ship, therefore, might have had three tiers of oars from each of her gangways, and three from the deck below them, or twelve in all.

\* Athen. lib. v. cap. 41.

I conceive it quite possible that six tiers might be pulled by oars, with one man at each ; and certainly there is no difficulty in supposing that triremes could be pulled by such oars.

Dio Cassius states that some of the ships of Antony, at the battle of Actium, had ten ranks ; and Polybius (lib. xvi), that there were ships of that size at the naval battle at Chios. But ships with so many ranks are always noticed as being of extraordinary magnitude. I therefore conceive that their oars may have been arranged and their rates reckoned on the same principles as those of the triremes and quinqueremes. But in ships of forty ranks of oars, the rate must have been reckoned on some other principle as yet unknown.

## DISSERTATION IV.

## ON THE SOURCES OF SAINT LUKE'S WRITINGS.

ST. LUKE states, in the preface to his Gospel, that before he wrote there were many accounts of the transactions of our Lord in existence (chap. i., ver. 1.); that his authorities were those personally engaged in them (ver. 2.); and that he had accurately investigated every thing from the beginning (ver. 3.).

The nature of the authorities alluded to by St. Luke, and the causes of the agreement which obviously subsists between his Gospel and that of St. Matthew and St. Mark, is a subject which has of late engaged the attention of critics, particularly in Germany.

Schleiermacher, one of the latest writers on the subject, in his Essay on the Gospel of St. Luke supposes that that Gospel was drawn up from several independent accounts, and has succeeded by a minute analysis, in pointing out where new authorities commence. Thus far the critic agrees with St. Luke in his preface, and so far he has made out his case. But he adds that St. Luke "was from the beginning no more than a compiler and arranger of the documents which he found in existence ;"\*

\* I quote from the English translation, which is, I believe, by Dr. Thirlwall, Bishop of St. David's.



and grounds this inference, for it is nothing more, upon St. Luke's "unreserved explicitness and vivid mode of representation." This last position can only be proved by actual comparison of the historian with his authorities. This Schleiermacher has not made. I am satisfied that the comparison which I am about to make, will show that, on this point at least, the critic is in error.

Professor Hug, in his Introduction to the Writings of the New Testament\*, supposes that "Luke found the works of Matthew and Mark and several other writings, and from these writings he drew up his Gospel."

St. Matthew falls under the description St. Luke gives of his authorities, and Professor Hug shows in a very satisfactory manner, that St. Luke has made use of his Gospel; but he fails in his proof that St. Luke copied from St. Mark. There is, indeed, a connection between St. Luke and St. Mark; but the conditions of agreement are so different from that which subsists between him and St. Matthew, that the same reasoning does not apply to both cases.

Eichhorn and his follower Bishop Marsh explain the connection which evidently subsists between the first three Gospels, by supposing that a general abstract of the transactions of our Lord was drawn up by certain anonymous writers in the Aramaic,

\* Translated by Dr. Wait, London, 1827, vol. ii. p. 192.

or dialect of the Hebrew spoken in Judea at the time, and that this formed the basis of the three first Gospels; but in order to explain the different matter found in each Gospel, it is supposed to have been enriched with many additions made at different times.

Bishop Marsh has been at pains to find out what additions and translations would be required to explain the phenomena of agreement between these Evangelists. He designates them by letters of the alphabet. According to him the copy St. Luke employed was enriched with the additions  $\beta + \gamma + B + \Gamma$ .<sup>2</sup> But the existence of such a document, and of its complicated apparatus of riders and translations, are mere conjectures contrived to account for appearances. We have no proof that a *protevangelium*, such as these writers imagine, or that any one of the particular forms in which it was alleged to have been used by the Evangelist, ever existed. To me it appears utterly improbable that such a document ever could exist; the earliest form of a record of events is never that of a dry abstract.

Have we, then, any means of investigating what are those authorities to which St. Luke refers? An answer to this question involves an inquiry into the origin of the other Gospels, with the exception of that of St. John, which was certainly not written till after that of St. Luke.

I stated, in the Introduction, that, in comparing the nautical style of St. Luke with that of other

writers, antient and modern, I had been led to compare his account of the miracle of stilling the tempest on the lake of Gennesareth with the accounts given of the same event by St. Matthew and St. Mark, the only other Evangelists who have recorded it; and that the comparison, had thrown what I considered important light upon the sources of his Gospel, its composition and the nature and causes of its obvious connection with the Gospels of St. Matthew and St. Mark. The method of comparison which I adopted was to copy St. Luke's account in a centre column, placing the accounts of St. Matthew and St. Mark in parallel columns on each side; we are thus, and thus only, enabled to see distinctly the exact amount of agreement and disagreement which subsists between them.

By comparing the accounts of that miracle, and other passages in which the same events are narrated by the first three Evangelists, very striking phenomena are elicited. We can see that St. Matthew describes the tempest on the lake in the language of a landsman and of a Galilean. In St. Mark we see a minute circumstantiality, and a local and technical use of terms, which seem to indicate that it was written at the time by an eye witness, an inhabitant of the western shore of the lake of Gennesareth, accustomed to the navigation of the lake. In St. Luke's account we recognise the style of the narrator of St. Paul's voyage to Italy, distinguished by the same accuracy and pre-

cision, the same familiarity with nautical language, and the same love of using it, which characterise the narrative of that voyage.

Further, the narrative of St. Mark is unhistorical. St. Mark does not, as the other Evangelists do, omit every detail not essential to the progress of the narration. Thus he interrupts the account of the tempest on the lake to tell us what vessels had sailed in company; a circumstance which always makes an impression on a seaman, and in which he feels an interest which a landsman cannot understand. The style of St. Mark in these passages is, in fact, that of the journal of an eye witness, written so soon after the events recorded, that the accessories which made an impression on the writer, remain still fresh in his recollection, and obtain a prominence in the narrative, proportioned rather to the interest which they have excited than to their importance as links in the chain of events. On the other hand, the style of St. Matthew is evidently historical. It is true we find in it the local and individual peculiarities I have mentioned, yet we find none of those episodic circumstantialities which distinguish the Gospel of St. Mark. The style of St. Luke is still more decidedly historical. We see that great care has been bestowed upon the construction and arrangement of the narrative. Events are related in the succession in which they occur; while in the more inartificial arrangement of the other Evange-

lists, the mention of an event is frequently postponed to a stage in the narrative where the event becomes of importance. Thus, in St. Luke's narrative of the tempest on the lake, we are told that our Lord fell asleep before we are told of the storm coming on, which is the order in which the events occurred. In the narrative of the other Evangelists we are first told of the storm coming on, and then of our Lord being found sleeping, the order in which the events became important. Again we can see the care with which St. Luke has made his narration as complete as possible, by filling up some of the gaps or abruptnesses, as we may call them, left in the other narratives. We shall find hereafter, in cases where we can trace his authorities, with what scrupulous fidelity this is done. It is not that he introduces circumstances to heighten the effect of the narrative, or to increase its probability; but in his character of historian, he introduces into his narrative circumstances necessary to its completeness, which we can see are implied, though not expressed, in the other narratives. Thus, in the narrative of the tempest on the lake St. Luke tells us "they launched forth," and that they "were in jeopardy." These are additions by St. Luke; but they are additions which required no separate information, they are necessary inferences from the other narratives, and evidently only inserted to add to the historical completeness of the narrative.

But comparisons, made in this way, are still

more interesting from the light which they throw on the connection of the origin of the first three Gospels. In comparing, with this in view, the accounts of the miracle of stilling the tempest on the lake of Gennesareth, the first phenomenon which presents itself is, that there is not a circumstance, not a phrase, in St. Luke's narrative, which is not found or implied in the narratives of the other evangelists, while each of the other accounts contains circumstances or expressions peculiar to itself. On pursuing the investigation, it will be found that the same remark applies to many, though not to all of the cases, where the same events are recorded by these three evangelists. The explanation which first occurs, of course is that in these passages the narrative of St. Luke has been derived wholly from the Gospels of St. Matthew and St. Mark. But in examining minutely what appears to have been taken from each, a distinction is at once apparent.

Whenever St. Luke appears to take from St. Matthew, there is an agreement in words and phrases as well as in substance; or, if a different word or phrase be used, a reason for the difference is generally apparent, as when provincialisms are corrected, or medical and nautical terms used with greater technical precision. But wherever St. Luke and St. Mark appear to have the same origin, however close the agreement may be in substance, there is generally that verbal difference, without any apparent motive, which we always find in independent

translations from the same original. The explanation must, therefore, be modified, and we are led to the conclusion that St. Luke's account of the miracle of stilling the tempest on the lake of Gennesareth, as well as other portions of his Gospel, are derived from the Gospel of St. Matthew in Greek, and from a narrative of the same events in another language, which has been independently translated by St. Mark.

A variety of reasons, which I shall touch upon hereafter, indicate that this original must have been a narrative or journal of the events in our Lord's history in which St. Peter was personally concerned, written by St. Peter at the time, in the Aramaic or Syrochaldaic language, a dialect of Hebrew, and called Hebrew by the Fathers. There are also reasons which indicate that in St. Mark's Gospel we have a complete and literal translation of this narrative or journal of St. Peter.

These conclusions at once explain the peculiarities I have remarked in the style of St. Mark, the minute circumstantiality, the local and technical language which characterise it; for it now appears that we have in it, in the passages to which I have referred, a cotemporaneous account of events which happened on the lake of Gennesareth written by a fisherman of the lake, an eye-witness of those very transactions. These conclusions also avoid a difficulty we should encounter if it appeared that St. Luke took directly from St. Mark. St. Luke, in the introduction to his Gospel, refers to those "who

from the beginning were eye-witnesses and ministers of the word " as the sources of his own information. But St. Mark was neither an eye-witness nor a minister of the word from the beginning. St. Peter was. Any difficulty, then, which might exist, if St. Luke in any passages appeared to copy from St. Mark, is removed when it appears that, in those passages, he is translating from St. Peter.

In the account of the tempest on the lake, and other passages of the same class, the accounts of St. Matthew and St. Mark appear to be, in a great measure, independent accounts of the same transactions; but there are other cases in which the verbal agreement between St. Mark and St. Matthew is so close for many verses together, that there can be no question that one of these evangelists has made use, in composing his Gospel, of the Gospel of the other.\* The question then arises, Which of the two is the original—which the copy? This question necessitates an inquiry into the relative dates of the composition of the Gospels. It appears to me to be so clear, from internal evidence, that St. Luke, in the composition of his Gospel, made use of the Gospel of

\* "In Mark, xiii. 13-32., there is such a close verbal agreement for twenty verses together with the parallel portion in St. Matthew's Gospel, that the texts of St. Matthew and St. Mark might pass for one and the same texts, in which a multiplication of copies had produced a few trifling deviations; at least they do not differ from each other more than each differs from itself in different MSS."—*Marsh on the Origin of the Gospel*, p. 4.



St. Matthew in Greek, that I assume it to be proved that St. Luke wrote after St. Matthew. Now, there is no doubt that St. Luke's Gospel is the "former treatise" referred to in the introduction to the Acts. It must, therefore, have been written before the Acts, and the Acts, as we know from the conclusion, were written within two years after the arrival of St. Paul in Rome. St. Luke's Gospel, therefore, must have been written some time before the expiration of two years from St. Paul's arrival at Rome. The Fathers concur in representing that St. Mark's Gospel was written at Rome, either when St. Mark was there with St. Peter, or after the death of St. Peter. This date is confirmed by his use of Latin words, and his explanation of Jewish customs and of Jewish terms. He must therefore have written his Gospel, or, more properly speaking, have translated St. Peter's original memoir, after St. Luke wrote his Gospel; for the period alluded to by the Fathers was not till after St. Paul's first visit; but, if he wrote after St. Luke, he must also have written after St. Matthew. If, then, one of the first two evangelists copies from the other, it must be that St. Mark copies from St. Matthew.

But here, in minutely comparing the passages of this class, a difficulty appears. Although these passages agree very closely in language (compare Matthew iv. 17-21. with Mark i. 14-20.), yet there are in St Mark's narrative some minute circumstances mentioned which are omitted by St.

Matthew, and a less careful arrangement of the order\*, which seem to show that St. Mark's account is the original, — St. Matthew's taken from it. Here, then, there appears to be an inconsistency. There are some similar phenomena, though not so striking in the verbal connection in certain passages, between St. Mark and St. Luke. The explanation I venture to propose is the following: If the agreement were in substance, not in language, we should infer that each had made independent translations from St. Peter. The agreement being in words as well as substance, we may explain the connection, by supposing that the translations were not independent. St. Mark's object appears to have been to give a faithful and literal translation of St. Peter. If, then, he found occasionally, in the Gospels of St. Matthew or St. Luke, parts of the narrative of St. Peter already translated literally or nearly so, he might make use of those parts, only altering them so as to make

\* In Mark i. 19, 20., we are told there were hired servants in the ship, a circumstance which St. Matthew (iv. 21.) omits. St. Mark tells us that James and John were in a ship, but does not mention their father Zebedee, till he tells us that they left their father Zebedee in the ship. St. Matthew removes the abruptness, by telling us that James and John were in the ship with Zebedee their father. This is an instance in which we cannot doubt which account was written first. The order of St. Matthew is the more correct in point of composition, and there was a good reason why he should have made the change. But if this were the order in the original, St. Mark would not have inverted the order.

them completely literal translations of the original. This he appears to me to have done; and we may thus account for the verbal agreement of two separate translations from one original. The verbal agreement will then be of the same nature, and arising from the same causes as that between the version of the Psalms, in the Prayer Book, and in the authorised translation of the Bible, which are evidently not independent translations, but the one translation made by altering the other. On the supposition I have made, this verbal agreement would only take place when St. Matthew or St. Luke had translated St. Peter without abridging and without interweaving information from other sources, and such appears on examination to be the case. The agreement is chiefly in the speeches of our Lord, which St. Matthew was always careful to give at length, without abridgment.

In other cases we have, between St. Matthew and St. Mark, instances of the same non-verbal agreement which we have already remarked as existing between St. Luke and St. Mark, indicating independent translations from a common original. These are generally in cases where we know that St. Matthew was not personally present, but that St. Peter was, such as the case of St. Peter's wife's mother, what took place within the house of Jairus, and the transfiguration. In these cases we find St. Matthew taking from the original, which I have supposed to be St. Peter's, so that we have in

such cases three different translations of the same original.

I have stated that there are reasons which indicate that the original, the existence of which I have assumed, was a narrative or journal written by St. Peter at the time in Aramaic. The internal evidence will be seen, when we come to examine in detail the passages in which the proofs occur. It will, however, be convenient previously to state the general results to which we are led by it:—

First, The author was a Galilean, as is proved by the Galileanisms.

Second, He resided at or near Capernaum, as is proved by local allusions.

Third, He was professionally familiar with the navigation of the Lake, and was in the boat in the storm, as is proved by technical language, and by circumstances which could only be known to an eye-witness.

Fourth, In the cases where only Peter, James, and John were present, he writes as an eye-witness.

Fifth, In events which took place in or near Peter's house, he speaks as if he were present and concerned in the occupancy of the house.

I shall, before proceeding to make the comparison, state shortly the external evidence tending to show that St. Peter was the author.

The early Christian writers concur in calling St. Mark the translator of Peter (*ἑρμηνευτὴς Πέτρου*), and many of them call his Gospel "the Gospel

of Peter." Thus Justin Martyr, speaking of Peter, immediately adds, "as it is written in his memoirs \*;" and quotes a passage from St. Mark's Gospel, iii. 7. Tertullian places this Gospel, as a

\* Γεγραφθαι εν τοις απομνημονευμασιν αυτου.—Dial. cum Trypho, pt. 2. Some critics deny that Justin means our Gospels by the term απομνημονευματα, although he tells us that the words were synonymous (απομνημονευμασιν δ καλειται ευαγγελια). It is quite true that he quotes passages from these "memoirs" which are not to be found in our Gospels; but we must remember the early age in which Justin wrote, and that he may have quoted works which have not come down to us, and, therefore, strictly speaking, the term, although it includes our canonical Gospels, is not confined to them. Justin, very often at least, obviously writes from memory, and makes slight alterations in the construction so as to accommodate the quotation to his own text. In the present case it appears to me perfectly clear that he is speaking of the passage which occurs in Mark iii. 16, 17.; he first mentions the change of Peter's name, and immediately after that of the sons of Zebedee into Boanerges, "which is the sons of thunder," quoting the above words of St. Mark (ὁ ἐστιν υἱοὶ βροντης). But there is another and more important question to answer. When Justin speaks, in this passage, of "his memoirs," does he refer to our Lord or to Peter, for he is speaking of both; that is, does he refer to the author, or the subject, of the memoirs? Now in every other instance where he uses the word απομνημονευματα, he refers them to the authors (the apostles) and not to our Lord, thus he says, Καὶ υἱὸν Θεοῦ γεγραμμένον αὐτὸν ἐν τοῖς ἀπομνημονευμασὶ τῶν ἀποστόλων αὐτοῦ. Here, where he is speaking expressly of the son of God, he does not say, as written in his memoirs, but "in the memoirs of his apostles." In the present case the name of St. Peter immediately precedes the pronoun αὐτοῦ, and he is termed "one of the apostles" (ἐνὰ τῶν ἀποστόλων). Mr. Norton remarks on this passage, "By 'his memoirs,' according to Justin's constant use of language, we must understand memoirs of which Peter may be regarded as the author."—*On the Genuineness of the Gospels*, vol. i. 131.

matter of evidence, on a par with the Gospels of St. John and St. Matthew, as being the work of St. Peter, "which Mark published (edidit), Mark being the translator of Peter\*;" and Jerome, speaking of St. Peter, says, the "Gospel according to St. Mark, is called his."†

In St. Peter's second Epistle‡ he makes a solemn

\* "Si constat id verius quod prius, id prius quod ab initio, id ab initio quod ab apostolia, . . . eadem auctoritas ecclesiarum apostolicarum cæteris quoque patrociniabitur evangeliiis quæ proinde per illas et secundum illas habemus, Joannis dico et Matthæi, licet et Marcus quod edidit Petri affirmetur, cujus interpres Marcus."—*Adv. Marcion.* iii. 5.

† "Sed et evangelium juxta Marcum, qui auditor ejus (*Petri*) et interpres fuit *hujus*, dicitur."—*De Vir. Illust.* c. 1.

‡ We are told by Jerome (*De Vir. Illustr.* i. 1.) and Eusebius (*H. E.* iii. 25.), that this Epistle and some others were not at first universally received as canonical. As it bears St. Peter's name, it must, if not written by him, be a forgery. Now, I admit that a forger would very naturally have inserted the allusion to the transfiguration (i. 16.); but, as the connection between St. Peter and St. Mark's Gospel was universally admitted when this epistle first appeared, a forger would have naturally taken the terms of his allusion to the transfiguration from that Gospel. But there is a marked difference between the Gospel and the Epistle. According to the Epistle the words from heaven are, "This is my beloved son in whom *I am well pleased*;" but in the Gospel they are, "This is my beloved son, *hear him*." If, however, we turn to St. Matthew's account which is also taken from the same original (St. Peter's), we find that the words quoted in the epistle actually were spoken; but a forger could not have taken them from St. Matthew's Gospel, for the translation is different. In St. Matthew the words are ἐν ᾧ εὐδοκῆσα, in the Epistle they are εἰς ὃν ἐγὼ εὐδοκῆσα. Here, although the meaning is perfectly the same, three out of the four words are different. What forger would have thought of this? The figure of "clouds

promise to his disciples or hearers: that he will enable them after his departure (*ἐξοδον*) to have these things always in remembrance, to show that they had not followed cunningly devised fables, and alludes to the transfiguration, at which he was present, and which is most circumstantially described in St. Mark's Gospel.

Let us suppose that this intention on the part of St. Peter was, to have his original memoirs translated and published after his "departure," and the passage is explained. Now, Irenæus states that after St. Peter's "departure, his disciple and translator, Mark, having written the things preached by Peter, delivered them to us."\* It is to be remarked that Irenæus uses the same word for "departure" (*ἐξοδον*) which St. Peter does. If this be accidental, it shows that the publication of St. Mark's Gospel did take place on St. Peter's "departure," and thus coincides with the time when the promise was to be fulfilled.

driven by a whirlwind," (ii. 17.) is quite professional; the striking word *λαίλαψ*, used both in the Epistle and St. Mark's Gospel (iv. 37.), may be called the appropriate and technical expression. St. Jude uses the same figure, but seems to quote it from memory; he remembers the word *ανυδροι*, "waterless," but forgets the wells, and renders it "waterless clouds carried round by the wind" (v. 12.). St. Peter's "waterless wells, clouds driven by a whirlwind," has all the appearance of being the original.

\* Μετα δε την τουτων (Πετρον και Παυλου) εξοδον Μαρκος ο μαθητης και ερμηνευτης Πετρον, και αυτος τα υπο Πετρον κηρυσσόμενα γεγραφως, ημιν παραδεδωκε. — Adv. Hær. iii. 1.

If, on the other hand, Irenæus used the expression designedly, because St. Peter had used it, it shows that he understood St. Peter to have alluded to the publication by St. Mark of his memoirs.

When we remember that Irenæus was the disciple of Polycarp, who was the disciple of St. John, we must consider him as good authority on such a point.

Here, however, it must be admitted, a difficulty meets us. Although we have in the Fathers many statements that St. Mark's Gospel was derived from St. Peter, yet they concur in stating that the communication made by St. Peter to St. Mark was oral. I think, however, it will be found on investigation, that the statements of the Fathers on this point are not of very great weight, and not sufficient to counterbalance the internal evidence that the communications of St. Peter, which St. Mark translated in his Gospel, must have been written.

Papias is the earliest writer who has entered on the subject of the origin of the Gospels; and succeeding authors appear to have adopted his statement, which has thus become traditional, which is this, — "The Presbyter (John) said this, 'Mark was the translator of Peter,' and he wrote accurately the things which he remembered." \* The testimony of Papias is extremely valuable from its

\* *Και τουτο ὁ πρεσβυτερος ελεγε, Μαρκος μεν ἑρμηνευτης Πετρου, και ὅσα ἐμνημονένυσεν ἀκριβως ἐγραψεν.* — *Ap. Euseb. H. E. iii. 137.*



antiquity ; but, like all human testimony, it must be carefully weighed before it is unconditionally admitted. In the first place, his testimony is at second-hand ; he does not tell us what he knew from personal knowledge, but what he heard from John the Presbyter, who undoubtedly was Mark's contemporary. Now, in all oral transmission of intelligence mistakes are unavoidable, most commonly arising from misapprehension on the part of the hearer, but the probability of misapprehension is very different with respect to the main fact and the explanatory details. The experience of every person must satisfy him that this is the case. We are so constituted that we are never satisfied with knowing what has happened, but we must also know how it happened ; and where we are not in possession of the facts we have recourse to conjecture : and in the course of oral transmission conjecture is often taken for assertion. The main fact in the statement of Papias is, that Mark is the translator of St. Peter. The manner in which the original was received by St. Mark is explanatory detail, which we may disprove without affecting the credibility of Papias or the truth of the main fact, and this in cases of hearsay evidence is in general all that can be depended upon.

That what St. Mark translated was received orally from St. Peter is in itself improbable. The Fathers very generally agree that St. Mark is the

translator of St. Peter, and that his Gospel was published at Rome: but did St. Peter preach in Hebrew at Rome? or, if he did, did he preach in the style in which St. Mark wrote? The Gospel is full of the circumstantial details which are natural in the contemporary relations of an eye-witness, but are unlikely to have been remembered after a length of years, or if remembered, to have been embodied in public addresses. It would require much stronger evidence than I have yet met with, to make me believe that the author of St. Peter's epistles should have preached as St. Mark wrote. Can we suppose that he would stop to tell a Roman audience the name of a blind beggar, or that of the beggar's father (Mark, x. 46.), or the number of bearers of a paralytic patient (ii. 3.), or that a young man lost his linen garment in a popular tumult (Mark xiv. 51.)? Such details, however unimportant they may be in themselves, are invaluable in a narrative, because they assure us the writer was an eye-witness, and that it must have been written when the impression which they made was fresh in the memory of the writer; but it is precisely because they do so that it is improbable they should be found in addresses delivered at a distant time, and in a distant region.

It is not only improbable, but I will go farther, and show that it is impossible that St. Mark should have received the subject matter of his Gospel in

any other manner than as a written document. A large proportion of St. Mark's Gospel appears also in the Gospel of St. Luke, as a different translation, and a certain portion of it in the Gospel of St. Matthew also, as a different translation. Such phenomena necessarily imply a written original.

It appears to me that some important distinctions in the nature of the agreement which subsists between the first three evangelists, and of the connection indicated by that agreement, have been overlooked.

The agreement which subsists between St. Luke and St. Matthew differs in kind from that which subsists between St. Luke and St. Mark, and each of these differs from that which subsists between St. Matthew and St. Mark.

The connection between St. Luke and St. Matthew is simply the connection between a historian and an original authority in the same language.

The connection between St. Mark and St. Luke is that between a translator and a historian who makes an independent use of the same original. The connection in this case is modified in some degree by St. Mark's acquaintance with St. Luke's Gospel. The cases in which the influence of St. Luke's Gospel on St. Mark's translation appears are principally speeches of our Lord, where St. Luke has apparently followed the original without abridgment, and where St. Mark has used the same language with St. Luke, either intentionally or

from unconscious recollection, but the cases are few and exceptional.\*

The connection between St. Matthew and St. Mark is more complicated. In some cases it is of the same nature as that between St. Luke and St. Mark, St. Matthew using as a historian the same original document which St. Mark has translated. We may call this connection *mediate*. In other cases the connection is *immediate*, and of this there

\* There are only two instances of perfect identity of language between St. Mark and St. Luke, where the identity does not extend to St. Matthew. The first is the address of the evil spirit to our Lord, and his reply; the passage occurs in Mark i. 24, 25., and Luke iv. 35. The dialogue is composed of short emphatic sentences scarcely susceptible of two ways of translating them. The other is the well-known passage, "Suffer little children to come unto me, and forbid them not, for of such is the kingdom of God; verily I say unto you, whosoever shall not receive the kingdom of God as a little child, he shall not enter therein." Mark x. 14., Luke xviii. 16.

This passage is well calculated to fix itself in the memory. I presume few Englishmen familiar with our authorised version would translate the passage differently.

There are other passages in which the agreement, though not strictly identical is too close to be accidental, but not close enough to allow us to suppose that the one evangelist had the Gospel of the other before him when he wrote; he evidently writes from memory: we find a word occasionally omitted, or an expression inverted: thus, in the speech of our Lord, which occurs in Mark, xii. 48., and Luke xx. 46, the two versions agree verbally, except at the commencement, where St. Mark renders it, "Beware of the Scribes, desiring in long robes to walk, and greetings in the markets," &c. In St. Luke it is "Beware of the Scribes, desiring to walk in long robes, and loving greetings in the markets," &c.

seem to be two kinds. St. Mark has either, using St. Matthew as an original authority, extracted continuous passages from his Gospel, or, where St. Matthew has followed St. Peter closely, St. Mark has adopted his translation with only such alterations as were necessary to make it quite literal.

The immediate connection between St. Mark and St. Matthew is so obvious, that Augustine, the earliest writer on the Agreement of the Evangelists (*De Consensu Evangelistarum*) calls him "the follower and abridger of Matthew."\* What Augustine says is so far true that St. Mark certainly does follow St. Matthew in certain portions of his Gospel; but he never abridges him. St. Mark's Gospel is shorter from omitting, not from abridging. This distinction between the immediate connection between St. Mark and St. Matthew, and the mediate connection between St. Mark and St. Luke, has been overlooked by Griesbach. He sees that a great portion of St. Mark's Gospel agrees either with St. Matthew's or St. Luke's. He sees that St. Mark has in one portion of his Gospel copied St. Matthew, and he supposes he must have copied St. Luke also. I am only acquainted with Griesbach's speculations on the subject through the work of Bishop Marsh.

According to Bishop Marsh, Griesbach reasons thus:—

\* "*Marcus eum subsecutus tanquam pedissequus et brevior ejus (Matthæi) videtur.*"

"The *whole* of St. Mark's Gospel, if we except four and twenty verses, is contained either in the Gospel of St. Matthew, or in the Gospel of St. Luke; or, in other words, with the exception of these four and twenty verses, there is no fact recorded in St. Mark's Gospel which is not recorded either in the Gospel of St. Matthew, or in the Gospel of St. Luke; consequently, St. Mark's Gospel *may* be a compilation from those of St. Matthew and St. Luke; and, therefore, whoever adopts the principle that the succeeding Evangelists copied from the preceding, must further conclude, not only that St. Mark's Gospel *may* be a compilation from those of St. Matthew and St. Luke, but that it really *is* so."

Griesbach is one of those writers who suppose that in this inquiry it is necessary to admit of one hypothesis to the exclusion of every other. He asks:—

"If Mark drew from any other source than Matthew and Luke, how do we account for the fact that, if we except about twenty-four verses, there is no part of his Gospel which may not have been borrowed from them?"\*

The answer of course is, that St. Mark did not borrow from St. Luke, but translated an original document, which St. Luke made use of. But there is another question not so easily answered:—If St. Mark borrowed from St. Luke and St. Matthew, in what part of their Gospels did he find the numerous circumstances which occur in his accounts

\* "Sin denique contendas alios aut plures quam hos duum-viros modo laudatos (Matthæum et Lucam) eum (Marcum) habuisse duces, scire velimus, qui factum sit ut hi nihil aliud, si versus excipias circiter 24, ipsi suggererent, quam quod æque e Matthæo et Luca mutuari potuisset." — *Quoted from Marsh*, p. 16.

of the same transactions? In the seven verses in which he narrates the miracle of stilling the tempest, there are more than the same number of circumstances mentioned by him, which are to be found in neither St. Matthew nor St. Luke. It will not do to say that these circumstances are unimportant. It is their want of importance which disproves the position of Griesbach, that St. Mark could have drawn his account of events from St. Matthew and St. Luke. This want of importance was a good reason why St. Matthew and St. Luke, writing as historians, should omit them; but assuming that St. Mark copied from St. Matthew and St. Luke, we can see no good reason why he should have inserted them.

I have noticed the argument of Griesbach in particular, because Strauss, in his "Life of Jesus critically examined," has availed himself of it to remove an obstacle which would be fatal to the introduction of his fantastic theory of the mythical origin of the Gospel. According to Papias, the Gospel of St. Mark existed in the days of John the Presbyter, who was a contemporary of the apostles; but if this was the case, it cannot possibly have had a mythical origin, nor is it pretended that it could. Strauss sets out with the assertion that "it can be shown that for a long period there was no written account of the life of Jesus." By a long period he means a period long enough for the historical origin

of events to be forgotten, and legends, fables, and myths to be superadded to ancient traditions.

The argument by which Strauss gets quit of the early existence of St. Mark's Gospel is, that Papias says that it is taken from the communications of St. Peter; but Griesbach says it is taken from St. Matthew and St. Luke, therefore the ancient Mark is not the Mark of the New Testament. I give the argument of Strauss in his own words:—

“We have the testimony of the same Papias who has the notice concerning Matthew, a testimony from the mouth of John (Πρεσβύτερος), that Mark, who, according to him, was the interpreter of Peter (ἑρμηνευτῆς Πέτρου), wrote down the discourses and actions of Jesus from his recollections of the instructions of that apostle. Ecclesiastical writers have likewise assumed that this passage from Papias refers to our second Gospel, though it does not say any thing of the kind, and is besides inapplicable to it. For our second Gospel cannot have originated from recollections of Peter's instructions, *i. e.*, from a source peculiar to itself, since it is evidently a compilation, whether made from memory or otherwise, from the first and third Gospels. As little will the remark of Papias, that Mark wrote without order (οὐ ταξίζει), apply to our Gospel. For he cannot by this expression intend a false chronological arrangement, since he ascribes to Mark the strictest love of truth, which, united with the consciousness that he had not the means of fixing dates, must have withheld him from making the attempt. But a total renunciation of chronological connection, which Papias can alone have meant to attribute to him, is not to be found in the second Gospel. This being the case, what do those echoes which our second Gospel, in like manner as our first, seems to find in the most ancient ecclesiastical writers, prove?”

To this he adds, in a note:—



"This (viz. that Mark is taken from Matthew and Luke) is clearly demonstrated by Griesbach in his 'Commentatio qua Marci Evangelium totum e Matthæi et Lucæ decerptum esse demonstratur.'"—*E. T.* i. 59.

It will be seen that the identity of St. Mark is attempted to be disproved by two arguments: the first, that the ancient Mark cannot have been taken altogether from St. Matthew and St. Luke, as Griesbach says our Gospel is; the next, that Papias states that St. Mark wrote *οὐ ταξείι*, that is, he did not preserve a strict chronological order in his narrative. Strauss supposes he did, or meant to do so; therefore Papias must be speaking of another Mark. The last argument, if good for any thing, will prove that the Mark of the Vulgate cannot be a translation of our Mark; because Jerome characterises St. Mark precisely as Papias does, both as to his connection with St. Peter and his want of order. He says "*juxta fidem magis gestorum narravit quam ordinem.*"

This is an easy way of disposing of the identity of an ancient writer; but, even if successful, it will not serve the purpose of Strauss, for he maintains that there were no early written accounts of the introduction of the Christian religion; but Papias mentions two, written in the age of the apostles, one written by an apostle, another translated from the immediate communications of an apostle. Strauss says truly that the mythical view could be embraced by those only who doubted the com-

position of these Scriptures by eye-witnesses or contemporaneous writers.\* If I had entertained doubts on the subject, the examination I have been led into would have removed them.

I now proceed to lay before the reader a selection of the parallel passages in the first three Gospels, from which I have drawn my inferences, in order that he may be able to test their soundness, and form his own opinion. I begin with the miracle of stilling the tempest on the Lake of Gennesareth, an instance which I have selected, in order to show the peculiarities which I have remarked in the style of the three Evangelists, and what I conceive to be the normal species of agreement between them.

\* I know of no critic to whom the epithet shallow can be more appropriately applied than to Strauss. He is singularly deficient in the two most essential pre-requisites for conducting critical inquiries with success; namely, habits of accurate research, and the power of drawing correct conclusions from well established facts. He appears neither to know how to collect evidence, nor how to weigh and sift it when collected by others. In the above cited case, we find him deciding on the identity of an antient author, not upon original investigation but upon the mere ipse dixit of Griesbach. It is only necessary to look at his references to see how little originality there is in his researches. Having had occasion to go over the same ground with him in the passages which I have selected for comparison, I can express my concurrence with Mr. Jones, in his late work on the Genuineness of the Gospels. Speaking of the work of Strauss, he says, "Nothing more superficial was ever put forth by a writer of any note as the examination of an important subject."—I. 74.

MATT. VIII.	LUKE VIII.	MARK IV.
	22 Και εγενετο εν μια των ημερων,	35 Και λεγει αυτοις εν εκεινη τη ημερα, οψιας γενομενης·
23 Και εμβαντι αυτω εις το πλοιον, ηκολουθησαν αυτω οι μαθηται αυτου.	και αυτος ανεβη εις πλοιον, και οι μαθηται αυτου· και ειπε προς αυτους· Διελθωμεν εις το πε- ραν της λιμνης.	Διελθωμεν εις το πε- ραν. 36 Και αφεντες τον οχλον παραλαμβα- νουσιν αυτον ως ην εν τω πλοιω· και αλ- λα δε πλοιαρια ην μετ' αυτου.
	Και ανηχθησαν. 23 Πλεοντων δε αυ- των αφνπνωσε· και κατεβη λαιλαψ ανεμου εις την λιμνην·	
24 Και ιδουν, σεισμος μεγας εγενετο εν τη θαλασση, ωστε το πλοιον κα- λυπτεσθαι υπο των κυματων·	και συνεπληρουντο, και εκινδυνευον.	37 Και γινεται λαιλαψ ανεμου μεγαλη· τα δε κυματα επε- βαλλεν εις το πλοιον, ωστε αυτο ηδη γεμι- ζεσθαι.
αυτος δε		38 Και ην αυτος επι τη πρυμνη επι το προσκεφαλαιον καθευδων· και
εκαθευδε. 25 Και προσελθοντες οι μαθηται αυτου ηγειραν αυτον, λεγοντες· Κυριε, σωσον ημας, απολλυμεθα. 26 Και λεγει αυτοις·	24 Προσελθοντες δε διηγειραν αυτον, λεγοντες· Επιστατα, επιστατα, απολλυμεθα·	διηγειρουσιν αυτον, και λεγουσιν αυτω· Διδασκαλε, ου μελει σοι οτι απολλυμεθα ;

MATT. VIII.	LUKE VIII.	MARK IV.
	22 And it came to pass on one of the days,	35 And the same day, when even was come
23 And when he was entered into the boat, his disciples followed him.	that he entered into a boat with his disciples :  and he said to them, Let us cross to the other side of the lake.	he saith unto them, Let us cross to the other side.
	And they put off. 23 But as they sailed he fell asleep : and there came down a squall of wind on the lake ;  and they were filled (συνεπληρουντο) and were in jeopardy.	36 And having sent away the multitude, they take him as he was in the boat. And there were also with him other little boats.  37 And there arises a great squall of wind, and the waves beat into the boat, so that it was now full (γεμίζεσθαι).
24 And, behold, there arose a great disturbance in the sea, so that the boat was covered with the waves ;  and he was asleep.		38 And he was in the stern, asleep on the seat cover ; and they  awake him, and say unto him, Teacher, carest thou not that we perish ?
25 And his disciples came to him, and awoke him, saying, Lord, save us : we perish.	24 And they came to him, and awoke him, saying, Master, master, we perish.	
26 And he saith to them,		

MATT. VIII.	LUKE VIII.	MARK IV.
Τι δειλοι εστε, ολιγοπιστοι; Τοτε εγερθεις επετιμησε τοις ανεμοις και τη θαλασση·	Ὁ δε εγερθεις επετιμησε τῷ ανεμῷ και τῷ κλυδωνι του ὕδατος·	39 Καὶ διεγερθεις επετιμησε τῷ ανεμῷ,  και ειπε τη θαλασση· Σιωπα, πεφιμωσο. Και εκοπασεν ὁ ανεμος, και εγενετο γαληνη μεγαλη.
και εγενετο γαληνη μεγαλη.	και εγενετο γαληνη.  25 Ειπε δε αυτοις·  Που εστιν ἡ πιστις ὑμων;	40 Καὶ ειπεν αυτοις· Τι δειλοι εστε οὕτω; πως ουκ εχετε πιστιν;
27 Οἱ δε ανθρωποι εθauμασαν, λεγοντες·  Ποταπος εστιν οὗτος, ὅτι και οἱ ανεμοι  και ἡ θαλασσα ὑπακουουσιν αὐτῷ;	Φοβηθεντες δε εθauμασαν, λεγοντες προς αλληλους· Τις αρα οὗτος εστιν, ὅτι και τοις ανεμοις επιτασσει και τῷ ὕδατι, και ὑπακουουσιν αὐτῷ;	41 Καὶ εφοβηθησαν φοβον μεγαν,  και ελεγον προς αλληλους· Τις αρα οὗτος εστιν, ὅτι και ὁ ανεμος και ἡ θαλασσα ὑπακουουσιν αὐτῷ.

Before proceeding to show that St. Luke's account of this miracle is altogether taken from the Greek of St. Matthew, and from the original, in another language, of St. Mark, I will offer a few remarks on the two other accounts.

St. Matthew, by his own account, did not join the company of the apostles till immediately after this miracle (Matt. ix. 9.), and there is nothing

MATT. VIII.	LUKE VIII.	MARK IV.
Why are ye fearful, Oh ye of little faith? Then he arose, and	But he arose, and	39 And he rose up, and
rebuked the winds and the sea ;	rebuked the wind, and the raging of the water :	rebuked the wind, and said unto the sea, Peace, be still.
and there was a great calm.	and they ceased, and there was a calm.	And the wind fell, and there was a great calm.
	25 And he said unto them,	40 And he said unto them, Why are you so fearful ?
	Where is your faith ?	How is it you have no faith ?
27 But the men	But they being afraid	41 And they feared with great fear,
wondered, saying,	wondered, saying	and said
What manner of man is this, that	one to another, Who then is this,	one to another, Who then is this,
even the winds	that	that
	even the winds	even the wind
and the sea	he commandeth, and the water,	and the sea
obey him !	and they obey him ?	obey him ?

in his account to indicate that he was in the boat when it was wrought. There are, on the other hand, in St. Mark's account many indications, that the author of that account was in the boat when the miracle was wrought ; but although St. Matthew, in this case, must have derived his account from those who were present, it is quite independent of the account translated in St. Mark's Gospel,

till towards the end, when he appears to have made use of it, beginning at Mark iv. 39.

Both St. Matthew's and St. Mark's accounts abound in provincialisms which St. Luke corrects. Calling the lake of Gennesareth the "Sea of Galilee" is a Hebraism; calling it "the Sea," without any adjunct, as they do (Matt. xiii. 1, &c.), is a mode of expression which could only be used by those who resided on its shores, and wrote during the time they did so. St. Luke invariably changes the word "sea" into lake.

There is another and still more strongly marked provincialism in both St. Matthew and St. Mark. They call the eastern shore of the lake "the other side" (το πέραν), without saying of what (Matt. viii. 18; Mark iv. 35.). This is evidently the colloquial language of Capernaum, and it is one of those provincialisms which would be used nowhere but on the spot.

Notwithstanding the conciseness of the narrative part of St. Matthew's Gospel, these provincialisms occur so often as to satisfy me, that he drew it up from journals written at the time; and that, when he came afterwards to reduce his account to its present form, and left out every thing like superfluous details, these provincialisms, which do not lengthen, but, in fact, rather shorten the narrative, were allowed to remain. He writes as an historian, but he thinks as a Galilean, or rather as a Capernaumite. He expresses himself, as he has been

accustomed to do, without offering explanations to make himself understood by those unacquainted with the localities.

These peculiarities in his style are often lost to the English reader, by the neglect of the translators to give the proper force to the Greek article in the translation. St. Matthew, in mentioning things and places perfectly familiar to him, naturally uses the definite article. Thus, in xiii. 1., he tells us our Lord "went out of *the* house, and sat by *the* sea side;" but we have nothing to lead us to know what house or what sea is meant. In this verse the article is translated in our authorised version; but it is not unfrequently omitted where it is in the original, and inserted where it is not in the original. In one place, this loose mode of translating produces an apparent contradiction between St. Matthew and St. Luke. In Matt. v. i., according to our version, our Lord "went up into *a* mountain," where he delivered his sermon; but St. Luke says, in the parallel passage (vi. 17.), "He came down, and stood in *the* plain." But, according to the original, St. Matthew says our Lord went up *to the mountain* (το ορος), and St. Luke, who had previously said the same thing (vi. 12.), says that he came and "*stood on a level place*" (επι τοπου πεδινου), the level place being evidently still on "*the mountain*." If we remember the local position of Capernaum, on the verge of a lake, backed by a mountain which



sloped down to the shore without any intervening level\*, the force of the definite article will be apparent. To the inhabitants of a town so situated, the country behind it is naturally termed *the* mountain. Mr. Stephens, a late American traveller, in describing the ruins of Capernaum, almost unavoidably adopts the same expression. He says:—"The ruins of Capernaum extend more than a mile along the shore, and back towards *the* mountain." (p. 114.) An eastern town, with narrow streets so as to exclude the sun, on such a site did not afford space to address a multitude. In order to do so, it was necessary, either to go to "the mountain," or to go into a boat and address the people ranged along the shore.

Besides that St. Luke corrects the provincialisms

\* This description of Capernaum agrees with that of *Tell Hum*, the name of a place where the ruins of a town, generally supposed to be those of Capernaum, are situated. Dr. Robinson, in his *Biblical Researches*, thinks it was farther to the south, at *Khan Yah*; grounding this opinion on a passage from Arculfus, whose account of his visit to the Holy Land, in the seventh century, is given by Adomnan, Abbot of Iona, in his "*Libri de Locis Sanctis*" (Mabillon, *Acta Benedictorum*, sæc. iii. § ii. p. 468.), who describes it as having "a mountain on the north, and the lake on the south" (*montem ab aquilonali plaga, lacum vero ab australi habens*). Dr. Wilson, a subsequent visitor, observes that, although *Khan Yah* has the mountain to the north, it has the lake to the east; but it is to the south of Tell Hum. (*Lands of the Bible*, vol. ii. p. 141.) This appears to me a conclusive proof that Tell Hum is the ancient Capernaum.

of his authorities, it is manifest, from his style, that he has not the same connexion with Galilee which the authors of the other two Gospels have. With them Galilee is always in the fore-ground. If they wish to give an idea of the wide extent of the fame of our Lord, they tell us, that it spread "throughout all the region round about Galilee" (Mark i. 28.); or of his preaching, that it was "throughout all Galilee." Used by a Galilean in Galilee, such expressions add to the effect; used by a person at a distance, they would rather weaken it. St. Luke, in drawing up his account from the same original, but at a distance and for those at a distance, says simply, in the first case, "The fame of him went out into every place of the country round about" (iv. 37.); and in the second, "He preached in the synagogues of Galilee."

Our examination hitherto leads to the same conclusion, with respect to each of the authors of the two first Gospels, namely, that he was a Galilean, resident on the western shores of the lake, and writing on the spot. But when we come to the descriptions of the storm and its effects, there is a marked distinction between them. Nothing can be more decidedly that of a landsman than St. Matthew's. He uses the same word *σεισμος* (viii. 24.) to express the agitation of the water, which he does to describe the disturbance of an earthquake (xxvii. 54. &c.). He tells us also that the effect

was "to cover the boat with the waves," an expression which does not convey any definite image to the mind. Compare this with the clearness and precision with which the account is given by the other two Evangelists, where we have the particular kind of squall and its exact effects. A sea struck the boat, and filled it. (Mark iv. 37.)

In my remarks on the nautical style of St. Luke, I observed that it was correct, but unprofessional, and I observed that what principally distinguishes the professional writer is, that he dwells more upon cause and effect than the unprofessional observer. The present case is an exception; but it is one which is easily explained, when we see that St. Luke is writing, not from his own observation, but from that of an author who views and describes events which took place in a boat on the lake, precisely as one whose occupation made him familiar with them.

Requesting the reader to keep these points in view, I now ask him to form his own judgment by a careful comparison of the foregoing extracts. The first point to be considered is the time when the event happened. According to St. Matthew, it appears to have taken place on the evening of the day in which Peter's wife's mother was cured; but according to St. Mark, several days intervened. If I am right in the supposition that St. Luke had both accounts before him, then we can understand why he should have contented himself with saying

that it happened "on one of the days"\* (*εν μια των ημερων*). Having done so, he does not think it necessary to specify the time of day, as is done in St. Mark's account.

St. Luke's account of the embarkation of our Lord and his disciples is evidently taken from St. Matthew, with very slight change. St. Matthew knowing what boat it was into which they entered, says they entered *the* boat. St. Luke omits the definite article. The command of our Lord to cross the lake is taken from St. Mark's account, correcting the provincialism of calling the other side of the lake simply "the other side."

We come now to a sentence which is peculiar to St. Luke, and extremely characteristic of that author: it is that which prefaces the mention of our Lord having fallen asleep. It is not directly taken from either of the other accounts, but is drawn by

\* The conclusion which Eichhorn draws from the account of this miracle is, that the Evangelists could not have seen each others' Gospels; because, first, St. Luke does not know the time, which St. Mark does; second, St. Luke is ignorant of some of the circumstances, which he passes over; third, that all three translate the Hebrew differently, with more or less use of the Greek translation of the "*Urevangel*." (Einleitung, vol. i. p. 269.) It is sufficient to notice these remarks, to show how far the ablest men may be misled by a theory. There is not a obvious reason for leaving the day uncertain. There is not a single circumstance left out which is essential to the conduct of the story; and it must be a very extraordinary "*Urevangel*" which could at once be the origin of St. Matthew's and St. Mark's accounts.

inference from both, and the introduction of it gives greater completeness to the narrative. It consists of two nautical terms, *ανηχθησαν* and *πλεοντων*, which may be translated, "they put off," and "when under way."\* (ver. 22, 23.) These are circumstances which must, of course, have happened; but the other Evangelists leave them to be implied.

St. Luke next tells us that our Lord fell asleep. This circumstance the other Evangelists do not mention, till they come to the period when he was awakened. St. Luke, writing historically, inserts the incident when it happened, not when it was observed.

The next circumstance is peculiar to St. Mark's account. I would ask here, has he inserted it to produce effect or to give a higher finish to his narrative, as some critics represent him as doing when he writes circumstantially? or has St. Luke left it out of his account as not essential to the conduct of the story? St. Mark tells us, in the 36th verse, that, dismissing the crowd, they

\* I give the meaning, rather than a literal translation of the expressions; both are elliptical and, as Mitford, speaking of the nautical language of the ancients, observes—"Through alterations which have taken place in things, words are not always to be found in any modern language to express with precision modern ideas." (Note to vol. ii. p. 361.) Mitford instances both *αναγω* and *πλεω* as nautical terms which cannot be rendered literally; the proper word equivalent to "put off," is *επαναγειν*, used by St. Luke (v. 3, 4.); "weighed" is not a term applicable to a fishing-boat.

took him (our Lord) "as he was" (*ὡς ἦν*) into the boat. This is any thing but what Strauss terms a "vivid touch." The author has left his meaning unexplained. We may conjecture that he meant "without preparation;" but that is only a conjecture. Now, a person writing an account at the time may very naturally leave unexplained a circumstance quite intelligible to himself and his companions; but who would think of introducing such a passage at a subsequent period?

They are now in *the* boat, and the author of St. Mark's account stops to tell us that there were "other smaller boats" in company. But we hear no more of these boats. Nothing could be more natural than for a fisherman, writing at the time, to mention such a circumstance. In itself it is surely superfluous detail, and not fitted for a historical account such as St. Luke's, who therefore omits it.

We come now to the accounts of the squall (*λαίλαψ*). Here the accounts of St. Matthew and St. Mark are evidently taken from different sources. St. Matthew tells us of the commotion in the water, St. Mark of the squall of wind. This variance in idea, as well as that in the language, to which I have referred, appears to me to indicate that the one account was written by a landsman, the other by a seaman by profession. A seaman, from that tendency I have before noticed to connect cause and effect in his descriptions will be found generally to describe a tempest by describing the wind.

The landsman who sees the waves, and that the immediate danger is from them, is apt to describe a tempest by its effect on the water. St. Luke evidently makes use of both accounts, and it is interesting to observe with what care and fidelity he combines the two ideas, that of the squall of wind, and that of the commotion of the water which it causes. "A *squall of wind* came down on the lake." St. Luke, it will be observed, adds the idea of the squall *coming down* (κατεβη), and he leaves out the epithet *great* (μεγαλη). In order to understand the propriety of these alterations it is necessary to inquire into the exact nature of the gale, called by St. Mark and St. Luke λαιλαψ. Aristotle makes it synonymous with στροβιλος, a whirlwind or tornado (ειλουμενον κατωθεν ανω), "whirling from below upwards."\* This is the second stage of the phenomenon, the recoil of the wind *upwards* after having come *down* on the water. Those accustomed to observe the effects of the wind under high lands will recognize in this description a proof of the great intensity which it had attained. The epithet "great," contained in St. Mark's account, is in fact implied in St. Luke's account. St. Luke likewise leaves out the word "great" in describing the calm that ensued. Strictly speaking, there can be no degrees of calmness which implies the absence of all wind. A calm and a great calm are there-

\* Λαιλαψ και στροβιλος πνευμα ειλουμενον κατωθεν ανω.—De Mundo, cap. 3.

fore in fact the same thing. Seamen are, however, in the habit of using it as a term admitting of degrees, and they speak of "a dead calm," "a flat calm."

St. Mark tells us that the waves broke into the boat and filled it; St. Matthew, less definitely, that the boat was covered by the waves. Dr. Bloomfield, in his note on the passage in Matthew, observes that both terms are to be taken with due qualification. St. Luke has observed that a qualification was required, and has applied it. According to him the boat was filled (*καὶ ἐκινδυνεύουν*), "*and they were endangered.*"

The next passage is peculiar to St. Mark, and very clearly indicates the pen of the eye-witness. It specifies the exact place in the boat where our Lord was sleeping, namely, at the stern, and on the *προσκεφαλαιον*,\* or seat-cover. This circumstance, although exceedingly graphic, is omitted by St. Luke, evidently because not historical.

The next circumstance noticed by St. Luke is the approach of the disciples to our Lord, which he

\* *Προσκεφαλαιον* (cushion) seems here to mean the *ὑπηρεσιον*, or seat-cover, on which the rowers sat. Hesychius explains the word *ὑπηρεσιον* by *προσκεφαλαιον* "ὑπηρεια τῶν κωπηλατούντων, δερματα τινὰ ὡς προσκεφαλαια, ἐφ' ὧν καθέζονται." Julius Pollux tells us that Cratinus used the word *προσκεφαλαιον* for the nautical seat-cover: "το ναυτικὸν ὑπηρεσιον ἰδίως Κρατίνος ἐν ταῖς ὥραις προσκεφαλαιον." (Jul. Pol. x. 40.) See note on Thucydides, ii. 93., *post*, Appendix, No. IV.



takes from St. Matthew. The title given by them to our Lord is translated differently by each of the Evangelists. By St. Matthew it is *Κυριε*, "Lord;" by St. Luke *Επιστατα*, *Επιστατα*, "Master, Master;" and by St. Mark *Διδασκαλε*, "Teacher." The words which are thus variously translated were no doubt, in the original, "Rabbi, Rabbi." We have an instance of a similar variety in the rendering of that word in the account of the transfiguration, where Peter says, "Lord, it is good for us to be here," &c. In St. Mark the word is *Rabbi*, in St. Luke, *Master* (*Επιστατα*), and in St. Matthew, *Lord* (*Κυριε*). The reduplication of the word in St. Luke is not introduced for effect, but is probably one of the instances where he has followed the original even more closely than St. Mark. \*

The remaining part of the 24th verse in St. Luke's account is evidently a combination of St. Matthew's account, and of the original translated by St. Mark, although somewhat abridged, and the provincialism of speaking of the waters of the lake as "the sea" corrected.

St. Matthew, in the 27th verse, mentions the "astonishment" of the disciples. St. Mark, in the corresponding part of his narrative, mentions their "fear." St. Luke combines both.

In the concluding section it will be observed

\* The Jews were in the habit of raising the import of titles of honour, by reduplication. See Dr. Campbell's Note on the subject, *Translation of the Gospels*, vol. i. 262.

that St. Matthew and St. Mark agree in matter, but not in words, which shows independent translations of the same original. It may here be asked how it happens, that when the accounts of these two Evangelists are so distinct in the other parts of the narrative they should agree so closely in this? In answer, I would say that a few words actually spoken may have been reported verbatim to St. Matthew, possibly by the author of St. Mark's account, or he may have availed himself of the written account of another apostle, in order to render his own more complete.

In the foregoing account St. Luke has combined every thing that is essential in the accounts of St. Matthew and St. Mark, and left out every thing that is not essential. He nowhere introduces any of those circumstantial details which render a description so graphic; and yet he brings the facts so clearly, as well as so faithfully, before the mind of the reader, as to persuade so acute a critic as Schleiermacher that the narrative is the work of an eye-witness. He observes, "As to the narration itself (viii. 22—56.) it betrays the eye-witness from beginning to end by its unreserved explicitness and vivid mode of representation."

A comparison of St. Luke's account with that of St. Mark shows too clearly which is the work of the eye-witness to require any further comment of mine; nor can it be necessary to add any re-

marks respecting the light which such a comparison throws on the origin of St. Luke's account of this particular miracle. But I have said that it also threw light upon the origin and connection of the first three Gospels.

In the first place it proves that the connection between St. Luke and St. Matthew is immediate—that St. Luke must have taken from the same Greek Gospel of St. Matthew which we have. We find no unnecessary changes in the expressions, which we constantly find when we compare his accounts with those of St. Mark; such as *συνεπληρουντο* for *γεμίζεσθαι* (ver. 22.); *επαυσαντο* for *εκοπασεν* (ver. 24.), &c. Whilst those changes prove that he has not copied from St. Mark, but translated from a common original.

In the next place it proves that St. Matthew's Gospel existed in Greek before St. Luke wrote his Gospel. We have the same proof of the relative antiquity of the two Gospels which the geologist has of the relative antiquity of different formations. He may not find them in juxtaposition; he may not see one bed resting above the other, and thence infer that the upper has been deposited subsequently to the lower; but if he finds fragments of one formation embedded in the strata of the other, he is certain that the fragments are older than the bed which contains them. To me these fragments of the Gospel of St. Matthew contained

in the Gospel of St. Luke afford much more convincing proofs of the priority of St. Matthew's Gospel than long continued extracts would have done. In that case, we might not have been certain which was the earliest writer, or whether both Evangelists did not borrow from a common source.

We have thus the testimony of St. Luke to the early existence of St. Matthew's Gospel in Greek. But this testimony not only proves the early date and genuineness of St. Matthew's Gospel; it also is evidence of its authenticity. St. Luke states that his authorities were eye-witnesses and ministers of the Word. If, therefore, we find that the Gospel of St. Matthew is one of St. Luke's authorities, we know that the author of that Gospel was, in the estimation of St. Luke, an eye-witness. I am satisfied that it also proves that our Gospel of St. Matthew is not a mere translation; for no man of accurate habits of investigation will ever have recourse to a translation, when he understands and has access to the original.

The external evidence afforded by the writings of St. Luke, of the genuineness and authenticity of the Gospel of St. Matthew, is far more valuable than if we had found that evidence either in the works of Christian writers earlier than Papias, or of contemporary Greek or Roman historians. St. Luke could not be mistaken as to the authenticity

of the authorities he made use of, and his scrupulous care in making use of his authorities assures us of the same care in selecting them.

I am aware that many writers suppose that St. Luke had not seen the writings of St. Matthew; but as their reasons rest upon their own preconceived opinions of the manner in which St. Luke ought to have composed his Gospel, and not upon facts, I cannot admit that they should outweigh reasons which do rest on facts. That St. Luke should have been ignorant of St. Matthew's writings is in itself improbable.\*

The connection between St. Luke and St. Mark I have already sufficiently illustrated.

The conclusion to which this examination of the three narratives leads me is, that St. Luke has

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\* Michaelis accounts for this ignorance, by supposing St. Luke did not understand Hebrew. (Marsh's translation, iii. 259.) Dr. Lardner accounts for the agreement by supposing it possible that independent observers might describe the same events in the same words. (vi. 233.) Michaelis, who has examined the agreement more closely, can offer no other explanation than that the evangelists made use of older *apocryphal* gospels, which they translated. (iii. 94.) Bishop Marsh, advancing a step farther, sees that this will not account for the verbal agreement, and supposes "that the person who translated St. Matthew's Hebrew Gospel into Greek frequently derived assistance from the Gospel of St. Mark, where St. Mark had matter in common with St. Matthew; and in those places, but in those places only, where St. Mark had no matter in common with St. Matthew, he had frequently recourse to St. Luke's Gospel. (p. 195.)

taken the original account which St. Mark has translated, as I conceive, from St. Peter, as the basis of his account of the Miracle, completing it however from the Greek account of St. Matthew.

I have observed that towards the end of St. Matthew's account there is an agreement in matter, not in words; or what may be called the agreement of independent translation. Now, if I am correct in supposing St. Mark to be the translator of St. Peter, we can see a very good reason why St. Matthew should have had recourse to St. Peter's authority in drawing up his Gospel; particularly in a case like the present, where we have strong grounds for supposing that St. Matthew himself was not present.

That St. Matthew did make use of this original document is put out of doubt by the next example which I shall take of the comparison of parallel passages, which is that of the cure of Peter's wife's mother. We know that on this occasion St. Matthew was not present, for the names of all the apostles who were, are given. The account of the transaction in St. Mark's Gospel is evidently by an eye-witness, and must therefore have been written either by Peter, or James, or John, the only three Apostles who were then present. It will be observed that both St. Matthew and St. Luke have taken their accounts from the same source.

MATT. VIII.	LUKE IV.	MARK I.
14 Και  ελθων ὁ Ἰησους εις την οικιαν Πετρου,  ειδε την πενθεραν αυτου βεβλημενην και πυρεσσουσαν.	38 Αναστας δε εκ της συναγωγης,  εισηλθεν εις την οικιαν Σιμωνος.  ἡ πενθερα δε του Σιμωνος ην συνεχομενη πυρετῷ μεγάλῳ· και ῥωτησαν αυτον περι αὐτης. 39 Και επιστας επα- νω αὐτης,	29 Και ευθεως εκ της συναγωγης εξελθοντες, ἦλθον εις την οικιαν Σιμωνος και Ανδρεου, μετα Ιακωβου και Ιωαννου. 30 Ἡ δε πενθερα του Σιμωνος κατεκειτο πυρεσσουσα· και ευθεως λεγουσιν αὐτῷ περι αὐτης. 31 Και προσελθων  ἡγειρεν αὐτην, κρατησας της χειρος αὐτης·  και αφηκεν αὐτην ὁ πυρετος ευθεως·  και διηκονει αυτοις.
15. Και ἥψατο της χειρος αὐτης,  και αφηκεν αὐτην ὁ πυρετος.  και ηγερθη, και διηκονει αυτοις.	         επετιμησε τῷ πυρετῷ· και αφηκεν αὐτην·  παραχρημα δε αναστασα διηκονει αυτοις.	

This example is interesting and important from the light which it throws upon the sources of St. Matthew's Gospel, as well as on those of St. Luke. St. Matthew was an eye-witness of many of the transactions which he has recorded, but he could not have been present at them all; and in such cases he must necessarily have had recourse to the accounts of those who were. By making use of the document which St. Mark has translated, he proves

MATT. VIII.	LUKE IV.	MARK I.
14 And	38 And rising up	29 And forthwith coming
Jesus, going into the house of Peter,	out of the synagogue he entered into the house of Simon;	out of the synagogue they went into the house of Simon and Andrew, with James and John.
saw his wife's mother stricken, and sick of a fever,	but Simon's wife's mother was labouring under an acute fever, and they besought him concerning her.	30 But Simon's wife's mother lay sick of a fever, and anon they tell him concerning her.
15 And he touched her hand,	39 And he stood over her, and rebuked the fever, and it left her, and immediately she rose, and she ministered unto them.	31 And he came and took her by the hand, and raised her up, and forthwith the fever left her,
and the fever left her, and she was raised up, and she ministered unto them.		and she ministered unto them.

that it was in existence before he wrote his Gospel, and he enables us to estimate his fidelity as a historian.

This is a simple case of three accounts taken from a common original in a different language. St. Mark's is the longest, and the question which presents itself is, whether it is easier to account for the difference of length by additions on the part of St. Mark, or omissions on the part of St.



Matthew and St. Luke. It has been said that St. Mark is a paraphrastic translator. To me he appears the most unparaphrastic of writers. The additional length of his accounts is because they relate additional facts; but the addition of facts is not paraphrase.

The first circumstance mentioned by St. Mark, which we do not find in the other two Evangelists, is, that the house in which the miracle was wrought, was in the joint occupation of Simon and Andrew. This could not be taken from either of the other writers. If St. Mark has translated St. Peter, we can easily see why the circumstance was mentioned; for it would naturally be a prominent fact in the mind of St. Peter himself; but it was historically unimportant, and therefore the other Evangelists omitted it.

We learn, from St. Mark's account, that James and John were present; but they take no part whatever in the proceedings; they are mere spectators, and we hear no more of them. Such circumstances mark the pen of the eye-witness; but they are unhistorical, and are with good reason omitted by the Evangelists who write historically. It is clear that this circumstance could not be taken either from St. Matthew or St. Luke.

The next circumstance to be noticed is, that St. Luke specifies the particular kind of fever which

Peter's wife's mother was labouring under, whilst St. Matthew and St. Mark merely say that she lay ill of a fever. In doing so, we recognize at once the pen of the physician and of the author of the account of St. Paul's voyage; for we find the same medical term *συνεχομένη*\* (seized with or labouring under) applied in the present case and in that of the father of Publius at Melita (Acts xxviii. 8.). St. Luke also specifies, as in that case, the particular nature of the fever in the very terms in which Galen tells us it was the custom of physicians to distinguish fevers.† It may be asked how St. Luke could ascertain the exact nature of the complaint, if St. Mark's translation be a literal one? The answer is, that a medical man might recognize the nature of the disease from the manner in which it is mentioned in the original, although an unprofessional translator did not, or he may have been at pains to ascertain it from other sources which he

\* "Nor does he (St. Luke) fail us often, as he has occasion to mention diseases or their cure, to select such appropriate language as none but a professional man could have used. In speaking of Simon's wife's mother, who was taken with a great fever (Luke iv. 38.), he uses the term *συνεχομένη* in the same sense as the Greek writers do."—Paper signed "I.K. Walker," *Gent. Mag.* June 1841, p. 585.

† *Και συνηθες ἤδη τοῖς ἰατροῖς ὀνομαζεῖν ἐν τούτῳ μὲν τὰς διαφορὰς τὸν μέγαν τε καὶ μικρὸν πυρετόν.*

"In hoc genere differentiæ medicis mos est *magnam et parvam* febrem nominare."—*Galen de Febris Differentia*, lib. i. c. 1.

had unquestionably the means of doing.\* I may here observe that it is the inquiring physician who is most anxious to mark the miraculous nature of the cure by the words *επετιμησε τω πυρετω* (he rebuked the fever).

Both Schleiermacher† and Olshausen‡ have remarked upon the circumstance of Peter's name being mentioned as if he were already well known, although there is no previous mention of him in this Gospel; and the reason they assign is, no doubt, the true one, namely, that St. Luke made use of different memoirs in drawing up his Gospel; and here began a new one. If we compare St. Luke with St. Mark, it will be observed, that the former begins to adopt the same document with St. Mark at c. iv. ver. 31. We can easily suppose that it would not occur to St. Luke to stop to explain who Peter was, because he was, at the time when St. Luke wrote, so well known, that no explanation was necessary.

We learn, from St. Mark's account, that after the cure was performed, at sun-set, many diseased and possessed were brought to be cured, "and that all the city was gathered together at the door," (v. 33.) Upon this and similar instances, Strauss,

\* In the account of the miraculous cure of the leper, St. Luke alone states the extent of the disease.

† Eng. Trans. p. 73.

‡ Ibid. p. 258.

in his Life of Jesus, makes the following remarks:—

“ Mark, in a highly dramatic manner, *as if he himself had witnessed the scene*, tells us that on the same occasion the whole city was gathered together at the door of the house in which Jesus was; at another time, he makes the crowd block up the entrance (ii. 2.); in two other instances he describes the concourse as so great, that Jesus and his disciples could not take their food (iii. 20., vi. 31.), . . . all highly vivid touches certainly; but the want of them can hardly be prejudicial to Matthew, for they look thoroughly like strokes of imagination, such as abound in Mark's narrative; and often, as Schleiermacher observes, give it almost an apocryphal appearance.” — Vol. ii. p. 193.

Now, if we examine the above-cited cases, it will be found that St. Peter must have been present in each of them; and if St. Mark was the translator of St. Peter, the explanation of the difficulty is obvious.

The following example is the narrative of the connected miracles of raising the daughter of Jairus, and curing the woman with the issue of blood. St. Matthew had, by this time, joined the company of the Apostles\*, and his account affords internal evidence that he writes from his own observation.

\* St. Matthew and St. Mark differ as to the time when the former joined. We cannot always assign a reason for the differences in the order of time in which events are related in the different Gospels. In the present case, I think, we can see a reason why St. Mark should have anticipated the time of Matthew's joining, — it naturally precedes the catalogue of the apostles.

MATT. IX.	LUKE VIII.	MARK V.
18 Ἰδου, ἀρχὼν ἐλθων	41 Καὶ ἰδου, ἦλθεν ἀνὴρ ὃς ὄνομα Ἰαεῖρος, καὶ αὐτὸς ἀρχὼν τῆς συναγωγῆς ὑπῆρχε.	22 Καὶ ἰδου, ἐρχεται εἰς τῶν ἀρχισυνα- γωγῶν, ὀνοματὶ Ἰαεῖρος· καὶ ἰδὼν αὐτὸν, πίπτει πρὸς τοὺς ποδᾶς αὐτοῦ· καὶ παρεκαλεῖ αὐτὸν πολλά,
προσεκύνει αὐτῷ,	Καὶ πεσὼν παρὰ τοὺς ποδᾶς τοῦ Ἰησοῦ, παρεκαλεῖ αὐτὸν  εἰσελθεῖν εἰς τὸν οἶκον αὐτοῦ.	λεγων·
λέγων.		
ὅτι ἡ θυγατὴρ μου	42 Ὅτι θυγατὴρ μονογενεῆς ἦν αὐτῷ ὥς ἐτῶν δώδεκα, καὶ αὕτη ἀπεθνήσκειν.	Ὅτι τὸ θυγατρίον μου
ἄρτι ἐτελευτήσεν·		ἐσχάτως ἐχει·
ἀλλὰ, ἐλθὼν ἐπιθεῖς τὴν χεῖρα σου ἐπ' αὐτήν,		ἵνα ἐλθὼν ἐπιθεῖς αὐτῇ τὰς χεῖρας,
καὶ ζήσεται.		ὅπως σωθῇ καὶ ζήσεται.
19 Καὶ ἐγερθεὶς ὁ Ἰησοῦς ἠκολουθήσεν αὐτῷ, καὶ οἱ μαθηταὶ αὐτοῦ.	Ἐν δὲ τῷ ὑπάγειν αὐτὸν  οἱ οἰχοὶ συνεπνίγον αὐτόν.	24 Καὶ ἀπηλθε μετ' αὐτοῦ·  καὶ ἠκολούθει αὐτῷ ὄχλος πολὺς, καὶ συνεθλίβον αὐτόν·
20 Καὶ ἰδου, γυνὴ αἰμορροῦσα δώδεκα ἐτη,	43 Καὶ γυνὴ οὖσα ἐν ῥύσει αἵματος ἀπο ἐτῶν δώδεκα,  ἥτις εἰς ἰατροὺς προσανάλωσασα ὅλον τὸν βίον, οὐκ ἰσχύσεν ὑπ' οὐδενὸς θεραπευθῆναι.	25 Καὶ γυνή τις οὖσα ἐν ῥύσει αἵματος ἐτὴ δώδεκα,  26 Καὶ πολλὰ παθούσα ὑπὸ πολλῶν ἰατρῶν, καὶ δαπανήσασα τὰ παρ' ἑαυτῆς πάντα, καὶ μὴδὲν ὠφελή- θαισα, ἀλλὰ μάλλον εἰς τὸ χειρὸν ἐλθούσα.

MATT. IX.	LUKE VIII.	MARK V.
18 Behold, there came  a ruler,   and worshipped him,   saying, My daughter  is even now dead ;  but come and lay thine hand on her,  and she shall live. 19 And Jesus arose, and followed him with his disciples.   20 And behold a woman, with a bloody issue twelve years,	41 And behold, there came a man named Jairus, and he was a ruler of the synagogue,  And falling at the feet of Jesus, besought him that he would come into his house.  42 For he had one only daughter, about twelve years of age, and she lay a-dying.   And as he went  the people crowded him. 43 And a woman, having an issue of blood for twelve years,  who had expended her whole living upon physicians, neither could be healed of any,	22 And behold, there cometh  one of the rulers of the synagogue, Jairus by name, And seeing him he fell at his feet, and besought him much,  saying, My little daughter  lieth at the point of death ; come and lay thy hands on her, that she may be healed, and she shall live. 24 And departing with him,  there followed him much people, and thronged him. 25 And a certain woman, having an issue of blood twelve years, 26 And having suffered many things of many physicians, and spent her all,  and was nothing bettered, but rather grew worse,

MATT. IX.	LUKE VIII.	MARK V.
προσελθουσα	44 Προσελθουσα	27 Ακουσασα περι του Ιησου, ελθουσα εν τῷ ὄχλῳ οπισθεν, ἤψατο
οπισθεν, ἤψατο	οπισθεν, ἤψατο	
του κρασπεδου του ἱματιου αυτου.	του κρασπεδου του ἱματιου αυτου·	του ἱματιου αυτου·
21 Ελεγε γαρ εν ἑαυτῇ. Ειν μονον ἀψωμαι του ἱματιου αυτου σωθησομαι.		28 Ελεγε γαρ·
	και παραχρημα εστη ἡ ῥυσις	‘Οτι καν των ἱματιων αυτου ἀψωμαι, σωθησομαι.
	του αἵματος αυτης.	29 Και ευθεως εξηρανθη ἡ πηγη του αἵματος αυτης·
22 ‘Ο δε Ιησους	45 Και ειπεν ὁ Ιησους·	και εγνω τῷ σωματι, ὅτι ιαται απο της μαστιγος.
επιστραφεις,	Τις ὁ ἀψαμενος μου ;	30 Και ευθεως ὁ Ιησους επιγινους εν ἑαυτῷτην εξ αὐτου δυναμιν ἐξελθουσαν, επιστραφεις εν τῷ ὄχλῳ, ελεγε·
	Αρνουμενων δε παντων, ειπεν ὁ Πητρος και οἱ μετ’ αυτου·	Τις μου ἤψατο των ἱματιων ;
	Επιστατα, οἱ ὄχλοι συνεχουσιν σε και αποθλιβουσιν, και λεγεις·	31 Και ελεγον αυτῷ οἱ μαθηται αυτου·
	Τις ὁ ἀψαμενος μου ;	Βλεπεις τον ὄχλον συνθλιβοντα σε, και λεγεις·
		Τις μου ἤψατο ;

MATT. IX.	LUKE VIII.	MARK V.
<p>approaching</p> <p>from behind, touched the hem of his garment; 21 For she said within herself, If only I can touch his garment</p> <p>I shall be healed.</p>	<p>44 Approaching</p> <p>from behind, touched the hem of his garment;</p> <p>and immediately the issue of her blood stanchd.</p>	<p>27 Hearing about Jesus, coming in the crowd from behind, touched</p> <p>his garment; for she said,</p> <p>If I can touch his garments</p> <p>I shall be healed.</p>
<p>22 But Jesus</p> <p>turned him about,</p>	<p>45 And Jesus</p> <p>said, Who is touching me? When all denied,</p> <p>Peter and they that were with him said (ειπεν), Master, the multitudes throng thee and press thee, and sayest thou, Who is touching me?</p>	<p>29 And straightway the fountain of her blood was dried up, and she felt in her body that she was cured of that plague.</p> <p>30 And straightway Jesus, knowing in himself that virtue had gone out of him, turned him about in the press, and said, Who touched my garment?</p> <p>31 And his disciples said (ελεγον) to him, Thou seest the multitude</p> <p>press thee, and sayest thou, Who touched me?</p>



MATT. IX.	LUNE VIII.	MARK V.
	<p>46 Ὁ δὲ Ἰησοῦς εἶπεν· Ἦψατο μου τις· ἐγὼ γὰρ ἐγγὺν δυναμὶν ἐξελθούσαν ἀπ' ἐμοῦ. 47 Ἰδούσα δὲ ἡ γυνὴ ὅτι οὐκ ἔλαθε,</p> <p>τρεμούσα</p> <p>ἦλθε, καὶ προσπεσούσα αὐτῷ,</p> <p>δι' ἣν αἰτίαν ἤψατο αὐτοῦ, ἀπηγγείλεν αὐτῷ ἐνὸπιον παντός τοῦ λαοῦ, καὶ ὥς ἰαθὴ παραχρημα.</p>	<p>32 Καὶ περιεβλε- πέτο ἰδεῖν τὴν τοῦτο ποιήσασαν.</p> <p>33 Ἡ δὲ γυνὴ</p> <p>φοβηθεῖσα καὶ τρεμούσα, εἰδὺς ὃ γέγονεν ἐν αὐτῇ, ἦλθε καὶ προσεπεσεν αὐτῷ, καὶ εἶπεν αὐτῷ πασάν τὴν ἀληθειάν.</p>
καὶ ἰδὼν αὐτήν, εἶπε· Θαρσεὶ θυγατέρ·	<p>48 Ὁ δὲ εἶπεν αὐτῇ· Θαρσεὶ θυγατέρ,</p> <p>ἡ πίστις σου σεσώκε σε· πορεύου εἰς εἰρήνην.</p>	<p>34 Ὁ δὲ εἶπεν αὐτῇ· Θυγατέρ,</p> <p>ἡ πίστις σου σεσώκε σε· ὑπάγε εἰς εἰρήνην, καὶ ἰσθὶ ὑγίης ἀπο τῆς μαστιγῆς σου.</p>
Καὶ ἐσωθῇ ἡ γυνὴ ἀπο τῆς ὥρας ἐκείνης.	<p>49 Ἐν αὐτοῦ λαλούντος, ἐρχεται τις παρὰ τοῦ ἀρχισυναγωγού, λέγων αὐτῷ· Ὅτι τεθνήκεν ἡ θυγάτηρ σου·</p>	<p>35 Ἐν αὐτοῦ λαλούντος, ἐρχονται ἀπὸ τοῦ ἀρχισυναγωγού, λέγοντες· Ὅτι ἡ θυγάτηρ σου ἀπέθανε·</p>

MATT. IX.	LUKE VIII.	MARK V.
<p>And seeing her he said, Be of good comfort, daughter, thy faith hath saved thee.</p> <p>And the woman was made whole from that hour.</p>	<p>46 But Jesus said, Somebody hath touched me, for I perceive that virtue hath gone out of me.</p> <p>47 But the woman, seeing that she was not hid,  trembling,  came, and falling down before him, she declared unto him, before all the people, for what cause she had touched him, and how she was healed immediately.</p> <p>48 And he said unto her, Be of good comfort, daughter, thy faith hath saved thee, go in peace.</p> <p>49 While he yet spake, there cometh one from the ruler of the synagogue's, saying to him, that thy daughter hath died,</p>	<p>32 And he looked round about to see her that had done this thing.</p> <p>33 But the woman,  fearing and trembling, knowing what was done in her, came and fell down before him, and told him the whole truth.</p> <p>34 And he said unto her,  Daughter, thy faith hath saved thee, depart in peace, and be whole of thy plague.</p> <p>35 While he yet spake, there come some from the ruler of the synagogue's, saying, that thy daughter is dead,</p>

MATT. IX.	LUKE VIII.	MARK V.
	μη σκυλλε τον διδασκαλον.	τι ετι σκυλλεις τον διδασκαλον.
	50 'Ο δε Ιησους ακουσας, απεκριθη αυτω, λεγων· Μη φοβου· μονον πιστευε, και σωθησεται.	36 'Ο δε Ιησους, ευθεως ακουσας τον λογον λαλουμενον, λεγει τω αρχι- συναγωγω· Μη φοβου· μονον πιστευε.
23 Και ελθων ο Ιησους εις την οικιαν του αρχοντος,	51 Εισελθων δε εις την οικιαν,  ουκ αφηκεν εισελθειν ουδενα,  ει μη Πετρον και Ιακωβον και Ιωαννην,  και τον πατερα της παιδος, και την μητερα.	37 Και  ουκ αφηκεν ουδενα αυτω συνα- κολουθησαι, ει μη Πετρον και Ιακωβον και Ιωαννην τον αδελφον Ιακωβου.
και ιδων τους αυλητας, και τον οχλον θορυβουμενον,		38 Και ερχεται εις τον οικον του αρχι- συναγωγου  και θεωρει  θορυβον, κλαιοντας και αλαλαζοντας πολλα.
λεγει αυτοις·	52. εκλαιον δε παντες και εκοπτοντο αυτην.  'Ο δε ειπε·  Μη κλαιετε·	39 Και εισελθων λεγει αυτοις· Τι θορυβεισθε και κλαιετε ;
24 Αναχωρειτε·		το παιδιον ουκ απεθανεν, αλλα καθευδει.
ου γαρ απεθανε το κορασιον, αλλα καθευδει.	ουκ απεθανεν, αλλσ καθευδει.	

MATT. IX.	LUKE VIII.	MARK V.
	trouble not the Master.	why troublest thou the Master any farther?
	50 But when Jesus heard it,	36 But straightway when Jesus heard the word that was spoken,
	he answered him, saying, Fear not, only believe, and she shall be healed.	he said to the ruler of the synagogue, Fear not, only believe.
23 And when Jesus came into the house of the ruler,	51 And when he came into the house	37 And
	he suffered no one to go in,	he suffered no one to accompany him,
	save Peter, and James, and John,	save Peter, and James, and John, the brother of James.
	and the father and mother of the maiden.	
		38 And he cometh to the house of the ruler of the synagogue, and observed
and saw the minstrels, and the multitude making a tumult,		the tumult,
	52 And all wept and lamented her.	and them that wept and wailed greatly.
he said to them,	But he said,	39 And entering, he said to them, Why make ye this ado, and weep?
24 Give place,	Weep not,	
for the maid is not dead, but sleepeth,	she is not dead, but sleepeth,	the damsel is not dead, but sleepeth,

MATT. IX.	LUKE VIII.	MARK V.
και κατεγελων αυτου.	58 Και κατεγελων αυτου, ειδοτες οτι απεθανεν.	40 Και κατεγελων αυτου·
25 'Οτε δε εξεβληθη ο οχλος,	54 Αυτος δε εκβαλων εξω παντας,	ο δε εκβαλων απαντας, παραλαμβανει τον πατερα του παιδιου, και την μητερα, και τους μετ' αυτου, και εισπορευεται ουπου ην το παιδιον ανακειμενον.
εισελθων		41 Και κρατησας της χειρος του παιδιου, λεγει αυτη· Ταλιθα κουμι· ο εστι μεθερμηνευομενον· Το κορασιον, σοι λεγω, εγειραι.
εκρατησε της χειρος αυτης·	και κρατησας της χειρος αυτης, εφωνησε, λεγων·  'Η παις, εγειρον· 55 Και επεστρεψε το πνευμα αυτης, και ανεστη παραχρημα·	
και ηγερθη το κορασιον·	και διαταξεν αυτη δοθηναι φαγειν.  56 Και εξεστησαν οι γονεις αυτης· ο δε παρηγγειλεν αυτοις μηδενι ειπειν το γεγονος.	42 Και ευθεως ανεστη το κορασιον, και περιεπατει· ην γαρ ετων δωδεκα·  και εξεστησαν εκστασει μεγαλη.  43 Και διεστείλατο αυτοις πολλα, ινα μηδεις γνψ τουτο·  και ειπε δοθηναι αυτη φαγειν.

St. Luke's account here, as that of the miracle of

MATT. IX.	LUKE VIII.	MARK V.
and they laughed him to scorn.	53 And they laughed him to scorn, knowing that she was dead.	and they laughed him to scorn.
25 But when the people were put forth,	54 And he put them all out;	And he put them all out, and taketh the father and mother of the damsel, and them that were with him, and entereth in where the damsel was lying, and taking the hand of the damsel, said to her, Talitha cumi, which is, being interpreted, Damsel, I say unto thee arise.
he, going in,	and taking her hand,	
took her by the hand.	called, saying,	
	Child, arise.	
And the damsel arose.	55 And her spirit returned, and she rose up immediately;	42 And straightway the damsel rose up, and walked; for she was of the age of twelve years.
	and he ordered to give her to eat.	
	56 And her parents were astonished;	And they were astonished with a great astonishment.
	but he ordered them	43 And he charged them straitly,
	that they should tell no man what was done.	that no man should know it;
		and commanded to give her to eat.

stilling the tempest, is based upon the original ac-

count which St. Mark has translated ; and here, as in that case, it is completed by circumstances taken from the independent account of St. Matthew. St. Mark's account is throughout in the style of an eye-witness writing at the time ; St. Matthew's in that of an historian, who was also an eye-witness, leaving out some circumstances not essential to the narrative, and drawing others from his own sources. His account, short as it is, contains several circumstances not noticed in the fuller account of St. Mark, such as that it was the "hem" (κρασπεδον) of our Lord's garment which the woman touched ; that he addressed to her the words, "Take comfort, daughter" (Θαρσει θυγατερ) ; and that there were minstrels (αυλητας) in the house of Jairus.\* On the other hand, it is scarcely necessary to observe that there are many circumstances in St. Mark's account which we do not find in St. Matthew's. There is one in particular which shows the perfect independence of the account in this part of the narrative : according to St. Matthew, Jairus told our Lord that his daughter was dead ; according to St. Mark, he told

\* The account of St. Matthew ceases to be independent from the time our Lord enters the house of Jairus ; the point where he takes up the original narrative (St. Peter's) is at Mark, v. 39. : "And when he was come in," &c. Now this is precisely the time when we learn that St. Matthew ceased to be an eye-witness, but when we know St. Peter still was. If St. Mark was the translator of St. Peter (ἐρμηνευτης Πιερου), this is explained. See the remarks of Strauss and Schleiermacher on this part of the narrative, given afterwards.

him she was dying.\* Whatever be the explanation, it is clear that St. Mark cannot have taken his account from St. Matthew, nor St. Matthew from a common source with St. Mark. Here, at least, the accounts are independent; and here, as in the case of the storm on the lake, whenever St. Luke agrees with St. Matthew, the words are the same, or only omitted, but not changed for synonyms, as in the cases where he agrees with St. Mark. Thus where St. Matthew mentions the particular part of our Lord's garment which the woman touched, the words used by him, and by St. Luke after him, are, "approaching from behind, she touched the hem of his garment." (*πρόσελθουσα ὀπισθεν, ἥψατο του κρασπεδου του ιματιου αυτου.*) In St. Mark the words are, "coming in the crowd from behind, she touched his garments." (*ελθουσα εν τω οχλω ὀπισθεν, ἥψατο του ιματιου αυτου.*) In like manner, where our Lord says, "Take comfort, daughter," St. Luke copies St. Matthew's words.

\* It is clear, from St. Luke's account, that Jairus did tell our Lord that his daughter was dead. When he left the house she was dying. A servant follows, and tells him she is dead. He must have told this to our Lord; for St. Luke says (v. 50.), "When Jesus heard it, *he answered him* (Jairus), Fear not," &c. I do not admit that the silence of St. Matthew, with regard to the previous communication, is any proof of his ignorance. His account consists of one hundred and twenty-three words; St. Mark's of three hundred and forty-one. He tells the important circumstance which, in this case, surely was that the child was dead. But even if Matthew had been ignorant of the previous message, it would have been no proof that his account was untrue.



The tumult at the house of Jairus was a circumstance well calculated to fix the attention of eye-witnesses; but it is not historical. It has no necessary connection with the miracle, and is omitted by St. Luke. St. Matthew notices it shortly; but his account is evidently different from St. Mark's, who does not mention the presence of the minstrels.

When we examine the three accounts in detail, it will be observed that there is not one circumstance of importance in either of those of St. Matthew and St. Mark which is not embodied in St. Luke's narrative, and that there is not one circumstance in St. Luke's narrative which is not either expressed in the narratives of St. Matthew and St. Mark, or necessarily implied in them, and evidently inserted by St. Luke to make the meaning clearer. The statement that the daughter of Jairus was his only child is not an exception to this. Both St. Matthew and St. Mark use the article the first time she is mentioned, which indicates that she was an only child.\*

\* I am inclined to think the difference between St. Luke's account of the request of the demoniac, called Legion, to our Lord, not to send the evil spirits "into the deep" (viii. 31.), and St. Mark's, not to send them "out of the country," is only a similar instance of the care, on St. Luke's part, to avoid any ambiguity which might arise from following the original closely; and that the words in St. Mark, which are translated, "out of the country" (*ἐξω της χωρας*), mean "off the land," taking *της χωρας* as land in opposition to water, as it is used by St. Luke, Acts, xxvii. 27.

St. Luke's account of these miracles begins at viii. 41., and continues to the end of the chapter. The first clause of the forty-first verse is an independent translation of the original of Mark (v. 22.). St. Luke leaves out "seeing him," as unnecessary, and adds the explanation of the object of the entreaties of Jairus, that it was to "go to his house." The notice of the age of the child, in St. Mark's account, does not occur till near the end of the narrative (v. 42.). St. Luke's introduction of it at the first mention of the maid is an instance of the care he uniformly takes in the arrangement of his narrative.

Without going over the whole of St. Luke's account in detail, I cannot avoid noticing an interesting trait of professional feeling, combined with the most scrupulous adherence to the facts of the case, in the account given of the woman with the issue of blood. According to St. Mark's account, which I consider to be a translation of the original, the woman "had suffered many things of many physicians, and had spent her all upon them, and was nothing bettered, but rather grew worse." This is, as Dr. Bloomfield expresses it, "strong language;" and although no doubt true, as to this particular case, yet from the unqualified manner in which it is expressed, it leads to an imputation on the profession. St. Luke states it so as to remove the general imputation, but in doing so adheres rigidly to the facts. He tells us that the woman

“ had expended her whole living upon physicians, neither could be healed of any.”

In the forty-fifth verse, also, we see the pen of the medical man: he mentions the cure of the woman in short, precise, and, as Dr. Freind observes, medical language.\*

The circumstantiality with which the “ intermediate evangelists,” as Strauss terms St. Mark and St. Luke (E. T. ii. 350.), recount the cure of the daughter of Jairus, compared with St. Matthew, a direct authority, has been commented upon both by Strauss and Schleiermacher. I give their remarks in their own words. Strauss says, —

“ To regard the ‘Talitha cumi’ of Mark, as an indication that this evangelist drew from a peculiarly original source, is to forget the more simple supposition that he translated those words from the Greek of his informant, for the sake of presenting the life-giving word in its original foreign garb, and thus enhancing its mysteriousness, as we have before observed, with reference to the Ephphatha in the case of the deaf man. After what we have seen, we shall willingly abstain from finding out whether *the individual who originally furnished the narrative in Luke were one of the three confidential disciples, and whether the one who originally related it also put it into writing*; a task to which only the acumen of Schleiermacher is equal.” — E. T. ii. 352.

Here then is the alternative presented by Strauss to his reader; in order to account for the phenomena in the accounts of St. Luke and St. Mark, we

\* “Lucæ vero phrasis ut magis medica ita simplicior et correctior εσται ἡ ῥησις.” — *Hist. Medicinæ*, p. 438.

must either adopt what he considers the simpler supposition, of supposing that St. Mark is a romancer, or that one of the three confidential disciples (Peter, or James, or John), who were present, furnished the narrative in writing. I admit that this is a fair alternative; and I do not well see how to avoid adopting one of the two. Let us see whether the critical acumen of Schleiermacher will help us in our determination. He says, speaking of this miracle, —

“ When we proceed to the last incident, the reanimation of the maiden, and observe with what unreserved minuteness, and in how unaltered a tone, even those circumstances are related which could only have come within the immediate knowledge of none but Peter, and John, or James; . . . if, I say, we take all this into account, we can scarcely do otherwise than refer our whole accounts to *one of the three disciples*.” — *E. T.* p. 136.

This I believe to be the true explanation.

I conclude these comparisons with the parallel accounts of the cure of the paralytic. All the three are evidently taken from the same original. The miracle was wrought before St. Matthew joined the disciples; and we can see, therefore, a reason why he should have availed himself of it. It affords a good example of the peculiarities which distinguish each of the three first evangelists, — the conciseness of St. Matthew, the medical accuracy of St. Luke, and the circumstantiality and strong language of St. Mark.

MATT. IX. 2.	LUKE V. 18-20.	MARK II. 3-5.
Και ιδου προσεφερον αυτω παραλυτικον επι κλινης βεβλημενον*	Και ιδου, ανδρες φεροντες επι κλινης ανθρωπον ος ην παραλελυμενος.  και εζητουν αυτον εισενεγκειν, και θειναι ενωπιον αυτου. Και μη ευροντες δια ποιας εισενεγκωσιν αυτον, δια τον οχλον, αναβαιντες επι το δωμα, δια των κεραμων  καθηκαν αυτον συν τω κλινιδιω  εις το μεσον εμπροσ- θεν του Ιησου. Και ιδων την πιστιν, κ. τ. λ.	Και ερχονται προς αυτον, παραλυτικον  φεροντες,  αιρομενον υπο τεσσαρων.  Και μη δυναμενοι προσεγγισαι αυτω δια τον οχλον,  απεστεγασαν την στεγην οπου ην* και εξορυξαντες χαλωσι τον κραββατον, εφ' ο παραλυτικος κατεκειτο*  Ιδων δε ο Ιησους την πιστιν, κ. τ. λ.

The first thing to be observed, in the foregoing extracts, is the mode in which the disease is mentioned by the different evangelists. St. Matthew and St. Mark use the popular expression paralytic (παραλυτικος); but this word is never used by the Greek medical writers.\* St. Luke uses the appropriate term (παραλελυμενος).

\* See Walker's observations on this passage, in his paper on the Medical Style of St. Luke, *Gent. Mag.* June, 1841.

<p>MATT. IX. 2.</p>	<p>LUKE V. 18-20.</p>	<p>MARK II. 3-5.</p>
<p>And behold they bear to him a paralytic, lying on a bed,</p>	<p>And behold men bearing on a bed one afflicted with paralysis,</p>	<p>And they go to him, bearing a paralytic, borne by four ;</p>
	<p>And they sought to approach him, and place him before him ;</p>	
	<p>but not finding it possible to approach him for the crowd, going up to the roof, they let him down, through the tiling,</p>	<p>but not being able to get near him for the crowd,</p>
	<p>with the bed,</p>	<p>they unroofed the roof where he was, and tearing it down, they lowered the couch on which the paralytic lay,</p>
	<p>in the midst, before Jesus,</p>	
<p>And Jesus, seeing their faith, &amp;c.</p>	<p>And seeing their faith, &amp;c.</p>	<p>But Jesus, seeing their faith, &amp;c.</p>

With one exception, the reasons of St. Luke's insertions and omissions are too obvious to require comment. That exception relates to the difference respecting the entrance by the roof. There is nothing about tiling in the accounts of St. Matthew and St. Mark. It is long since the incident of the entrance by the roof has been made a handle of by those whose object it was to discredit the writings of the evangelists. It is right that such objections

should be stated as broadly as possible, in order that they may be answered. I take Strauss's statement of them, as embracing them all. He says,—

“ In the description of the scene, in which the paralytic (Matt. ix. 1. ff. parall.) is brought to Jesus, there is a remarkable gradation in the three accounts. Matthew says simply, that as Jesus, after an excursion to the opposite shore, returned to Capernaum, there was brought to him a paralytic stretched upon a bed. Luke describes particularly how Jesus, surrounded by a great multitude, chiefly Pharisees and Scribes, taught and healed in a certain house, and how the bearers, because on account of the press they could not reach Jesus, let the sick man down to him through the roof. If we call to mind the structure of oriental houses, which had a flat roof, to which an opening led from the upper story; and if we add to this the rabbinical manner of speaking, in which the *via per portam* was opposed to the *via per tectum*, as a no less ordinary way for reaching the ὑπερῶν, upper story or chamber, we cannot, under the expression καθιέναι δια τῶν κεραμῶν, understand any thing else than that the bearers, who, either by means of stairs, leading directly thither from the street, or from the roof of a neighbouring house, gained access to the roof of the house in which Jesus was, let down the sick man, with his bed, apparently by cords, through the opening already existing in the roof. Mark, who, while with Matthew he places the scene at Capernaum, agrees with Luke in the description of the great crowd and the consequent ascent to the roof, goes yet farther than Luke, not only in determining the number of the bearers to be four, but also in making them, regardless of the opening already existing, uncover the roof, and let down the man through an aperture newly broken.

“ If we ask here, also, in which direction—upwards or downwards—the climax may most probably have been formed, the narrative of St. Mark, which stands at the summit, has so many difficulties, that it can scarcely be regarded as nearest the truth, for not only have opponents asked, how could the roof be broken open without injury to those beneath, but Olshausen himself

admits that the disturbance of the roof, covered with tiles, partakes of the extravagant. To avoid this, many expositors suppose that Jesus taught either in the inner court, or in the open air in front of the house, and that the bearers only broke down a part of the parapet, in order to let down the sick man more conveniently. But both the phrase, *δια των κεραμων*, in Luke, and the expression in Mark, render this conception of the thing impossible; since here neither can *στέγη* mean parapet, nor *αποστεγαζω* the breaking of the parapet; while *εξορρω*, can only mean the breaking of a hole. Thus, the disturbance of the roof subsists; but this is further rendered improbable on the ground that it was altogether superfluous, inasmuch as there was a door in every roof. Hence help has been sought in the supposition that the bearers indeed used the door previously there, but because this was too narrow for the bed of the patient, they widened it, by the removal of the surrounding tiles. Still, however, there remains the danger to those below; and the words imply an opening actually made, not widened.

“But dangerous and superfluous as such a proceeding would be in reality, it is easy to explain how Mark, wishing to elaborate the narrative of St. Luke, might be led to add such a feature.”—Vol. ii. 311.

It is quite true that there is no difficulty in entering eastern houses by the roof. How, then, was it necessary in this case to break open the roof? How came St. Luke to mention “tiling,” seeing the roofs of eastern houses are flat, and covered with cement? And how could the roof be broken open without endangering the inmates of the house?

The answer to these questions will be best furnished by an examination of the peculiarities of the structure of the roofs of the houses of the East.

Dr. Shaw, in his *Travels in Barbary*, has pro-



duced an array of authorities from ancient writers, to show that the preposition *δια* does not necessarily mean "through;" that *στεγη* might mean the awning of the open court (impluvium), which was merely drawn aside, and the man lowered over the wall.\* This is evading the difficulty, rather than answering it; and the word *εξορυξαντες*, in St. Mark's account, implies violence, especially when we find that it is superadded to *απεστεγασαν*, uncovered or unroofed. Neither can I understand how a person upon the roof can be lowered *by* the tiling, although it is quite intelligible that he should be lowered *through* it when broken open.

The answer to these difficulties I apprehend to be this, — The roof is itself flat, but the opening in it is necessarily covered by a secondary roof, to keep out the rain, just as the entrance from the deck to the cabin of a ship is covered by a secondary roof, called "the companion." Now, these secondary roofs are frequently sloping, and covered with tiles; and it will easily be understood why it might be necessary to remove such a roof from the horizontal opening, or trap-door, in order to allow a person in a horizontal position, in a couch, to pass through it.† The removal of a few tiles

\* Travels, p. 277.

† The flat-roofed houses in Morocco and Malta have always a small secondary roof over the aperture, by which the inhabitants ascend to the "house top." Few, if any, of those which I have seen, would admit of a person being lowered through

would probably not occupy many minutes, — the replacing them not many hours ; hence St. Matthew left the circumstance unnoticed, as unimportant, whilst St. Luke, by adding “ through the tiling,” explained it. It is sufficiently obvious that such a process could not injure those below.

Since the preceding pages were written, I have met with a dissertation on the origin of the first three Gospels, appended to a work on the genuineness of the Gospels, by Mr. Norton, a late American writer.

Mr. Norton does not admit that any of the first three evangelists made use of a common document, or copied from either of the others. He endeavours to account for the verbal agreement which subsists between St. Matthew and the other two in this way : He supposes that St. Matthew's Gospel was written in Hebrew, and was not translated till about the end of the first century ; that the Hebrew Matthew, although not immediately connected in origin with Mark or Luke, yet where it narrated the same events, and particularly where it gave the same speeches, would nearly approach the other evangelists ; and that this independent agreement was so close, that the Greek translator of St.

the opening in a horizontal position, till “ the companion ” was removed. I have a distinct recollection of some of these roofs being sloping, and covered with tiles. It is quite certain that in a climate such as Palestine the houses must have had such a cover too ; and it is equally certain that if any part of the roof was tiled, it must have been this part.

Matthew occasionally made use of the words of St. Mark and St. Luke, as a translation of St. Matthew.

Were the instances of verbal agreement confined to the speeches, it is possible that independent reports might approach so nearly in some cases that the Greek report might be used as a translation of the independent Hebrew report; but the agreement is far too extensive for such a supposition; and we meet with it also in the narrative parts, where such an agreement between independent writers is wholly out of the question. And even if we could thus account for the verbal agreement between St. Matthew and the other two evangelists, this hypothesis gives no explanation of the verbal agreement between St. Mark and St. Luke.

Mr. Norton's work contains a minute and interesting analysis of the proportions of the several Gospels in which the agreements occur. Interesting and useful for many purposes as these may be when the true theory of the agreement is established independently, they do not appear to me to have any bearing on the previous question, of what are the causes of that agreement. This is not a problem of which averages can furnish the solution. One distinct case of agreement may show a connection, which ninety-nine cases of differences cannot disprove.

I conclude, therefore, that before St. Luke wrote his Gospel, St. Matthew's existed in Greek, as we

now have it. Mr. Norton estimates the proportion of verbal agreement which subsists between St. Luke and the two other evangelists, at about one tenth of the whole of his Gospel; we may suppose, therefore, that to that extent he made use of the Gospel of St. Matthew, as an original authority.

Before either St. Luke or St. Matthew wrote their Gospels, the memoir which was afterwards translated by St. Mark, existed in Hebrew, and has been made use of by both these evangelists. St. Luke appears to have embodied the whole of it in his Gospel; hence the agreement between him and St. Mark, when they differ in the order of time from St. Matthew. If it could be proved that St. Mark's translation of this document was made before St. Luke wrote his Gospel, then St. Luke has so far availed himself of that translation as to use its language in one or two short speeches. I am inclined, however, to think that the publication of St. Mark's Gospel was not till after that of St. Luke, in which case, St. Mark has made a similar use of the translation of St. Luke; but in no case have St. Luke or St. Mark made use of each other's Gospel as a historical authority.

The phenomena which have been elicited by this examination may be termed the phenomena of historical contemporaneity; they are the phenomena which we constantly meet with when we scrutinise minutely the works of authentic contemporary historians.

## DISSERTATION V.

## ON THE GEOLOGICAL CHANGES IN ST. PAUL'S BAY.

IN attempting to identify places on the sea coast with the descriptions or notices in ancient authors, we must always take into account the geological changes which may or must have taken place in the interval.\* Such changes must be owing to one or other of the following causes : —

First, Violent disturbances, such as would affect the configuration of the land.

Second, Movements of elevation or depression.

Third, The wasting action of the sea.

Fourth, The siltage of the disintegrated matter.

With regard to the first of these causes, there is no reason to suppose that any change has been produced by these since the island has been inhabited by man. Nor is there any reason to suppose

\* Major Rennel is, if I mistake not, the first author who pointed out the necessity of this in his paper "On the Place where Julius Cæsar landed in Britain." (*Archæologia*, p. 499.)

Captain Copeland, R. N., who states that he is not a geologist, speaking of the sea coast of Megara, says, "The localities described by Thucydides do not agree in any one particular with the present features of the coast." (*Arnold's Thucydides*, ii. 396.) My friend, Lieutenant Spratt, R. N., who is a geologist, has proved, that if we allow for the necessary changes, the notices of Thucydides agree perfectly with the localities. See *Journal of Geographical Society*, viii. 205.

that any movement of elevation has taken place within the same period. There has, however, been a slight movement of depression within the human period, but it belongs to a remote antiquity, anterior, in all probability, to the time of the shipwreck. That such a movement has taken place is proved by the tracks of wheels, not connected with existing roads, which are deeply impressed on the upper surface of the rocks, and are seen at different points of the island to pass under the sea. \*

There is, however, a geological proof that the extent of this change of level has been very small, and not sufficient to have produced any perceptible change on the relative positions of the soundings, and of the headlands and shores of the bay.

The proof is this: In the narrow channel which separates the sea, on the outside of Selmoon Island, from St. Paul's Bay (a place where two seas meet), there is to be seen under water a vertical escarpment, running across from the island to the mainland (see dotted line on chart), which is evidently an ancient sea cliff, and which must have been scooped out by the action of the sea, during the period of stationary level which preceded the present. From the transparency of the water, it can easily be observed. I estimate the change of level which this appearance indicates at ten feet. In Captain Smyth's chart the difference in the sound-

\* See a Paper by the Author on Recent Depressions in the Land, *Journal of the Geological Society*, Aug. 1847, p. 235.

ings on each side of the escarpment is two fathoms, which agrees very well with my estimate. If we assume that the depression has taken place since the shipwreck, it would make only a slight change in the absolute position of the soundings, and of the two headlands of the bay; but none at all in their relative positions. The point of Koura, before the last depression, must have extended farther to the north, but so must the line of twenty fathoms. The point of Salmonetta, or Selmoon Island, must have extended farther to the east; but the line of fifteen fathoms must have been just so much farther to the east; hence the reasoning in both cases would be the same. It is only necessary to look at the dotted line parallel to the coast, which marks the depth of three fathoms, to show that a much greater change of level than what has actually taken place, would make but a trifling alteration in the contour of the shores of the bay. If, then, the depression did take place since the shipwreck, the conclusions to be drawn from the comparison of the locality with the narrative would be the same.

The only effect which the wasting action of the sea could have, would be that of rendering it impossible to ascertain the exact point of appulse of the ship when she was run ashore; but this I have not attempted to do. In every other respect, an allowance for the changes arising from this cause strengthens the conclusions we draw from the present state of the coast.

The shore from Salmonetta Island to Mestara Valley is now girt with mural cliffs, where a ship could not be stranded with safety; but there is a creek in this line of cliff, now without a beach, but which we know, from the form of the land, must at one time have had a beach which has been worn away in the course of ages, by the wasting action of the sea. The degradation of the land actually taking place at this point is proceeding with more than usual rapidity, owing to the inclination of the beds, and the tendency which large fragments of the rock have to fall over when undermined by the sea.\* I therefore think it not improbable that the beach existed at the time of the shipwreck. If so, this creek, which, as may be seen on the chart, is immediately to the south of the place which Captain Smyth has marked as the traditional place of the wreck, agrees perfectly with the spot where a ship from the eastward anchored in the entrance of the bay would be driven in a gale from the E. N. E. (Euro-aquilo); and is close to a place where two seas meet.

The rate of siltage at the bottom of the sea must, from the structure and size of the island,

\* Abela, who wrote in 1642, states, on the authority of an ancient manuscript, that the ruins of the residence of Publius, the chief man of the island, stood here. He says: "*Villam hospitalem S. Publii, vicinam rupibus dithalassis quibus (Act. 27.) navis Pauli quassata maris tempestate stetit impacta donec solveretur a fluctibus, fuisse in clivo ad orientem ac septentriones adversum,*" &c. — p. 230.



be extremely slow. The rocks disintegrate into minute particles, which are of course carried by the action of the waves and the currents to a great distance, before they are finally deposited on the bottom of the sea. There is but little alluvium washed down by streams from any part of the island; and at St. Paul's Bay there is scarcely any. The surface of the island, which is very flat, is composed of a series of beds of tertiary rock, which overlies a thick stratum of clay. The superincumbent rock is much fissured. The rain, which falls on the surface, passes through the fissures, is absorbed by the clay, and finally reappears in springs. No stream flows into St. Paul's Bay, except one which issues from a translucent spring, which the natives term "Ayn tal Razzul," or "The Apostle's Fountain," a name which proves the great antiquity of the tradition; for the signification of the Phœnician word Razzul (Apostle) is unknown to the Maltese.\*

\* "Fons Paulinianus ex arenti solo in mare profluit cui nomen Ayn tal Razzul . . . ignota nunc indigenis significatione nominis; at Tyris et Phœnicibus fontem Apostoli sonat."—Quoted from an ancient MS. by Bres, a Maltese: *Malta Antica Illustrata*, p. 395.

On a stone near this fountain there are inscribed, or rather were, for I was unable to discover them, the following lines, which I give from Bryant (p. 67.):—

"Hac sub rupe cava, quam cernis ad æquoris undas,  
Exiguus trepidat fons salientis aquæ,  
Religione sacra latices venerare, viator;  
Naufragus has dederit cum tibi Paulus aquas."

During the excavation of the dry docks at Valetta, my friend, Mr. John Anderson, of the engineer department, paid particular attention to the phenomena, from which the amount of siltage during the human period could be deduced. According to his report, in that branch of the harbour of Valetta, works of art are not found more than six or eight feet below the present bottom of the sea. But the deposit there must be much more rapid than in any part of St. Paul's Bay.

The dock is situated in a deep inlet, at the mouth of an extensive valley, and its shores have been from the earliest times the site of a town. In such a situation, the rate of siltage must have been much quicker than in the comparatively shallow inlet of St. Paul's Bay, where none of those causes of rapid deposition operate. The events of the shipwreck, moreover, did not take place in the bay, but in the open sea, at its mouth, where the action of the waves and currents would tend to prevent deposition. From these considerations, I am satisfied that no change in the depth of the sea, caused by siltage, could in any part, which a ship driven in to this part of the coast from Crete, must have passed over, have been perceptible in so rough a measurement as that where the smallest quantity is a fathom.

The rocky point of Koura must anciently have extended farther to the north than it does at present; hence a ship driving into St. Paul's Bay,

eighteen centuries ago, must have been nearer the breakers than one at the present day, under the same circumstances, would be. Hence the possibility of passing them unobserved was less than it is at present; and consequently the agreement between the locality and the narrative even more perfect.

## APPENDIX.

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### I.

#### ON EURO-AQUILO.

(From Dr. BENTLEY's "*Remarks on a late Discourse on Free-thinking*," p. 97.)

"STEPHENS followed what he found in the *King of France's* copies, Acts xxvii. 14., *ανεμος τυφωνικος ο καλουμενος Ευροκλυδων*, and he is followed by your translators, 'There arose against it a tempestuous wind called *Euroclydon*;' . . . if the printer had the use of your *Alexandrian* MS., which exhibits here *Ευρακυλων*, it's very likely he would have given it the preference in his text; and then the Doctor, upon his own principles, must have stickled for this.

"The wind *Euroclydon* was never heard of but here; it's compounded of *Ευρος* and *κλυδων*, the *wind* and the *waves*, and it seems plain, *à priori*, from the disparity of these two ideas, that they could not be joined in one compound; nor is there any other example of the like composition.

"But *Eurakulon*, or, as the Vulgate *Latin* here has it, *Euro-aquilo*, approved by *Grotius* and others, it is so apposite to the context, and to all the circumstances of the place, that it may fairly challenge admittance as the word of *St. Luke*.

"'Tis true, according to *Vitruvius*, *Seneca*, and *Pliny*, who make *Eurus* to blow from the winter solstice, and *Aquilo*

between the summer solstice and the north point, there can be no such wind or word as *Euro-aquilo*, because the *Solanus*, or *Apeliotes* from the cardinal point of east comes between them. But *Eurus* is here taken, as *Gellius*, ii. 22., and the *Latin* poets use it, for the middle equinoctial east, the same as *Solanus*; and then in the table of the XII. winds, according to the ancients, between the two cardinal winds, *Septentrio* and *Eurus*, there are two at stated distances, *Aquilo* and *Kaikias*. The *Latins* had no name for *Kaikias*, ‘*Quem ab oriente solstitiali excitatum Græci Kaikiav vocant, apud nos sine nomine est,*’ says Seneca, *Nat. Quæst.* v. 16.

“*Kaikias*, therefore, blowing between *Aquilo* and *Eurus*, the Roman seamen (for want of a specific word) might express the same wind by the compound *Euro-aquilo*, in the same analogy as the *Greeks* call *Eupovotos* the middle wind between *Eurus* and *Notus*, and as you say now *North-east* and *South-east*. Since, therefore, we have now found that *Euro-aquilo* was the *Roman* mariner’s word for the Greek *Kaikias*, there will soon appear a just reason why *St. Luke* calls it *ανεμος τυφωνικος*, a tempestuous wind, *Vorticosus*, a whirling wind, for that is the peculiar character of *Kaikias* in those climates, as appears from several authors, and from that known proverbial verse—

‘Ελκων εφ’ αὐτον ὡς ὁ Καικias νεφη.

So, with submission, I think our *Luther’s* and the *Danish* version have done more right than the *English* to your sacred text, by translating it *Nord-est*, *North-east*; though, according to the present compass, divided into XXXII, *Euro-aquilo* answers nearest to *East-north-east*, which is the very wind which would directly drive the ship from Crete to the African *Syrtis*, according to the pilot’s fears in the 17th verse.”

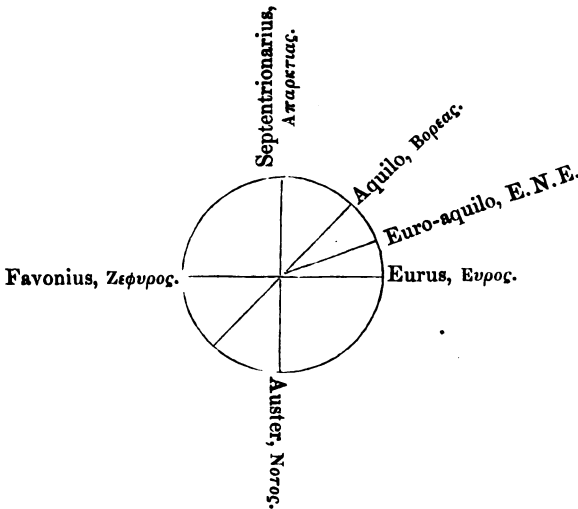
## II.

## NOTE ON THE READING "EURO-AQUILO."

(From GRANVILLE PENN's translation of the "New Covenant"  
(Testament).)

"OF the two readings, *Ευρακυλων* and *Ευροκυλων*, the former has the testimony of the highest antiquity. Bishop Marsh, with Shaw, and all his other learned predecessors, thought it peculiar to the *Alex. MS.* (Michaelis, *Introd.* vol. ii. p. 110. 620.), but it is the reading also of the far more ancient *Vatican MS.*, and is witnessed also by *Jerome*, and the *first* or Latin translation. The difficulties experienced by commentators in endeavouring to settle the reading of this word have been owing to a pre-assumption that it is to be interpreted from *the Greek*; and if any one should attempt to explain *σπεκουλατωρ*, *φραγγελω*, or *κνησος*, by *the Greek*, he would find himself in a similar dilemma. Dr. Shaw, objecting to the reading *Euraquilo* in his *Travels*, &c., (p. 360. fol.), observes: 'As the ship was of Alexandria, sailing to Italy, we *may suppose* the mariners to have been *Grecian*, and too well acquainted with the received and vernacular *terms* of their occupation to admit of this *Græco-Latin* or *barbarous* appellation, as they may think it;' but it would be full as reasonable to suppose that the mariners might have been *Egyptian*, or even *Italian*, as the ship was freighted for Italy, to supply that country with corn. Dr. Bloomfield enforces Shaw's objection, by observing that *Euroaquilo* would be *heterogeneously compounded of Greek and Latin*. Now this objection would extend equally to prove that *no wind* was denominated by the Latins '*Euro-auster*,' for Aulus Gellius (lib. ii. c. 22.) expressly declares *Auster* to be a *Latin* term; and yet we know that the S. E. wind was actually so denominated by the Latins.

Besides, every reader of Virgil and Horace knows that the name Eurus had become so thoroughly naturalised in Rome, as no longer to be regarded as a foreign name. The latter of those learned writers observes, ‘*Ακυλων* could not represent *Aquilo* ;’ yet, if he had referred to the relative orthographies *Aquila* and *Ακυλας*, in Acts xviii. 2., Rom. xvi. 3., &c., and had recollected the relative dialectic terminations *ο* and *ων* of the two languages (*Πλατων*), he would have perceived that *Aquilo* must have been represented in Greek orthography by *Ακυλων*. We cannot reason positively and accurately of winds from the employment of their names by the poets, because they used them with licence, according to the demands of their metre. In Aulus Gellius we have a minute enumeration of them, with their names and quarters, as follows :



“ Pliny places *Aquilo* ‘inter septentrionem et exortum solstitiallem’ (*N. H.* ii. 47.), *Euro-aquilo* will be still more eastward, or *East-north-east*. The *Eth.* version paraphrases

*ventus Aquilonarius*, a N. E. wind. *Ευροκλυδων* of the *jun.* Greek texts, as also *Ευρυκλυδων*, *Ευτρακηλων* *Copt.*, *Ευρακλυδων* *Syra post.*, *Ευρακυκλων* *Arm.*, *Ευρακηλων* *Sahid.*, will all, therefore, have been transcriptural *errata*. Dr. Bloomfield thinks it clear, that both external and internal evidence unite in requiring the common reading, *Ευροκλυδων*, to be retained and that it was sometimes used as an adjective, as appears from the adjective *ερικλυδων*, which is used by a later Greek writer *ap. Steph. Thes.* We are much obliged to the learned annotator for drawing our attention to this solitary word, which might otherwise have remained for ever unnoticed. This word is employed in a metrical chronicle of one of the Byzantine historians, Constantine Manasses, who lived in the middle of the twelfth century.

‘Ο Καίσαρ γὰρ ἐφύσησε, βοῶντας ὡς βαρυβοῶτας,  
ὡς ἐρικλυδων ἀγρίος, ὡς δυσπνους ἀπαρκτίας. — p. 104.

Which lines are thus interpreted by Leunclavius:—*Cæsar autem adflabat, tanquam graviter spirans Aquilo, vel sævus ille tempestatesque ciens Subsolanus.*

“Leunclavius has certainly assumed *ερικλυδων* here to be an *adjective*, but a little closer inspection will reveal to us that the poet used it, not as an adjective, but as a *substantive*, as the proper name of one of three north and east winds, which he specifies, and, in fact, the very wind mentioned by St. Luke; which, in the *junior* or Constantinopolitan copies of the Scriptures best known to the poet, had been changed to *ευροκλυδων*, and in the printed copy of this poem to *ερικλυδων*.

‘For Cæsar raged like the deep-roaring Boreas;  
Like the fierce Ericlydon; and like the hard-blowing Aparctias.’

“But we have specially to consider that St. Luke heard the name of the wind on board an Alexandrian ship, that the two oldest documents which record the name are



Alexandrian, and that both record the name *Ευρακυλων*, *Euraquilo*; and farther, that the technical language of the conquering nation was extensively adopted in the countries enclosing the Mediterranean, particularly in those maritime cities that were in most frequent and active intercourse with Rome, as was eminently *Alexandria*. The whole context is wanting in the *Cod. Ephr.* from c. xxvi. 20. to xxvii. 16., and in the *Cod. Bezae* from c. xxii. to the end of the book."

### III.

#### REMARKS ON THE MELITA OF ACTS XXVIII.

(From Bochart's "*Chanaan*," lib. i. cap. xxvi.)

"SED altera hic sese offert majoris momenti quæstio ad utram appulerat Paulus. Sunt enim quibus videtur de Illyrica egisse Lucas. In his Constantinus Porphyrogenneta, a quo ponitur in censu insularum Illyrici litoris: Νησος ἑτέρα μεγάλη τα Μελετα, ητοι το Μαλοζεαται, ἣν εν ταις Πραξεσι των Αποστολων ὁ ἅγιος Λουκας μεμνηται, Μελιτην ταυτην προσαγορευων. *Alia magna insula quæ Meleta ceu Malozeatæ vocatur, cujus in Actis Apostolorum meminit Sanctus Lucas, Melitam eam nominans.*

"Cui sententiæ favere volunt: — 1. Quod in Adria jactatur Paulus antequam in Meliten appellat (Actor. 27. 27.), unde colligunt agi de insula sinus Adriatici. 2. Quod barbaros habuit incolas (Actor. 28. 2. 4.), cum Africanam Meliten Græci pridem incoluerant. 3. Quod in insula Melite nullius oppidi meminit Lucas, cum Africana urbem habuerit insulæ cognominem quæ superstes hodieque est.

"Sed hæ objectiunculæ tanti non sunt, ut quemquam dimovere debeant a vulgari sententia quam firmissimæ

rationes adstruunt. Primo, enim (Actor. 27. 13. 14.), circa Cretam quum navigaret Paulus, excitatur *ανεμος τυφωνικος ὁ καλουμενος Ευροκλυδων*, — *ventus turbulentus* quæ vocatur *Euroclydon*, vel, ut legit Vulgatus Interpres, *Ευρο-ακυλων*, *Euro-aquilo*, quem lectionem si sequaris, res est confecta; neque enim *Euro-aquilo* potuit navem in Illyricam impellere. Præstitisset id *Euronotus*, non subcontrarius *Euro-aquilo*, ut docet situs locorum. Sed quocunque modo legas, ventum illum Euroclydonem in Austrum inclinasse potius quam in Septentrionem inde palam est, quod illo flante nautæ metuunt ne in Africæ Syrtim incidant. (Actor. 27. 17.) Nihil tale formidaturi si ventus navem in Illyricam impulisset, quæ ora est Syrti et Africæ obversa.

“ 2. Actor. 27. 41.: *Περιπεσοντες εις τοπον διθαλασσου επωκειλαν την ναυν*, *cum incidissent in locum bimarem illæserunt navem*. In locum bimarem, id est in isthmum. Horat. *Od.* 7. lib. i.:

‘Aut Ephesum, bimarise Corinthi  
Mœnia.’

Ovid. eleg. 12. lib. i. *Trist.*:

‘Aut postquam bimarem cursu superavimus Isthmum.’

Hic Isthmus ad insulæ ortum æstivum hodieque ostenditur, et vocatur ab incolis, *La Cala di S. Paolo*, S. Pauli adpulsus.

“ 3. Actor. 28. 7.: *Circa locum illum erant χωρια τῷ πρώτῳ του νησου ονοματι Ποπλιῳ, prædia primo insulæ nomine Publio*. Eum intelligo quem insulæ Romani præfecerant. Nam hujus insulæ præfectos ita nominari solitos et ex hoc loco colligere est, et ex veteri epitaphio quod in marmore Græcis literis se Melitæ vidisse refert Quintinus: Α. ΚΑ. ΤΙΟΣ. ΚΤΡ. ΙΠΠΕΤΣ. ΡΩΜΑΙΩΝ. ΠΡΩΤΟΣ. ΜΕΛΙΤΑΙΩΝ. *L. Ca. filius Cyr. eques Romanorum, PRIMUS Melitensium*. Nempe idem antea nominis fuerat præfectis Carthaginiensibus, qui Punica phrasi dicebantur *דודאשניים*,

*primi*. Sic Dan. 10. 13.: Michael est unus principum, מִיכָאֵל, *primorum*. Proinde ראש, *caput, dux, princeps*, et ראשון, *primus*, sunt conjugata. Atque hoc ipso loco pro primo Syrus habet ראש et Arabs ראש, *caput*. Eodem fecit quod Arabice, ut ראשון *primus*, ita ראש est præficere, sed et provinciam regere, quasi πρῶτον dicas.

“ 4. Tres menses continuos in illa insula hæsit Paulus cum centurione et aliis (Act. 28. 11.), qui numerus hominum fuit cclxxvi (Act. 27. 37.). Quod vix quisquam crediderit de Illyrica Melite; quia cum nonnisi quatuor passuum millibus a continenti distet, et Epidaurum in conspectu habeat, portum celeberrimum et hospitibus commodissimum, centurio Romanus maluisset eo trajicere, quam totam hyemem in misera insula degere, in qua tam multas advenas sine gravibus incommodis diversari fuisset nefas.

“ 5. Jam quod iidem dicuntur Puteolos vecti fuisse in Alexandrina nave quæ in eadem insula hyemaverat (Act. 28. 11.), quis de Illyrica Melita intellexerit? Cum ab Ægypto Puteolos contendebat, Africana Melite pene invitis sese offerat. At quisquis Alexandria Puteolos iturus Illyricam Melitem petit merito dici queat, sin minus toto cœlo, saltem toto salo, aberrasse.

“ 6. Hoc potissimum quod Lucas e Melite profectos addit primo Syracusas deinde Rhegium appulisse (Act. 28. 12, 13.); quæ via, quam est recta si profectio fuit ex Africana Melita, tam flexuosa fuerit et præpostera, si ex Illyrica discesserunt, e qua potius per Rhegium Syracusas iter est, quam per Syracusas Rhegium, quia Rhegium est vicinius.

“ 7. Jam si autoritate certatur Constantino Porphyrogenneta, longe antiquior est Arator Sub-Diaconus, qui sic habet, lib. ii. *Historiæ Apostolicæ*: —

‘ Sicanio lateri remis vicina Melite.’

“ Nec difficile est solvere quicquid contra objiciunt. Nam in Adria quidem jactari dicitur navis appulsura Melitem (Act. 27. 27.); non tamen in Adriatico sinu, quo multo

latius patet Adria, seu quod idem est Adriaticum Mare. Sinus enim Adriaticus cum Illyrico desinit. At Mare Adriaticum idem est cum Ionio: Hesychius — *Ιονιον πελαγος ὁ νυν Ἀδριας, Ionium Mare quod nunc Adria*. Juvenalis, vetus scholiastes — *Diu navigaturus de Tyrreno mari ad Adriacum*; Adriacum pro Ionio dixit. Ita cum Juvenalis: —

‘Tyrrenos igitur fluctus, lateque sonantem  
Pertulit Ionium.’

“Hinc Ptolomæus Siciliam ab ortu, Epírum et Achaiam a meridie, et Peloponnesum adeoque Cretam ab occasu definit Adriatico pelago. Et in Ovidio non semel Adriam ab Ægæo dividit Isthmus Corinthiacus. Sic lib. iv. *Fastorum*: —

‘Adriacumque patens late bimaremque Corinthum.’

et in lib. i. *Trist. eleg. 12.*: —

‘Aut hæc me gelido tremerem cum mense Decembri  
Scribentem mediis Adria vidit aquis,  
Aut postquam bimarem cursu superavimus Isthmum,  
Alteraque est nostræ sumpta carina fugæ.’

“Proinde Philostratus, lib. ii. *Imaginum*, in Palæmone, eum isthmum scribit, *Ανγαιον και Ἀδριου μεσον κεισθαι, medium esse inter mare Ægæum et Adriaticum*. Et in *Apollonio* suo, lib. iv. cap. 8., Neronem idem tradit de hoc isthmo scindendo cogitasse ut Adriaticum Ægæo mari misceret. Eodem fecit quod Alpheus apud Suidam in *Ἀλφειος* et rursus in *Ἀρεθουσα*, e Peloponneso in Siciliæ Arethusam influere legitur *δυομενος δια της Ἀδριαδος θαλάσσης, pelagus subiens per mare Adriaticum*. Hinc de Alpheo Pausanias in *Arcadicis*, *Ἐμελλε δε ἀρα μηδε Ἀδριας ἐπισχησεν αὐτον του προσω, neque illius cursum Adria cohibitura erat*. Cætera ibi vide.

“Quid quod Adriaticum mare ad Africam usque extensum est, si Ethicum sequimur et Orosium, apud quos Tripolitana provincia, ubi Arzuges et Leptis Magna, habet

a septentrione mare Adriaticum, et a meridie Creta finitur mari *Lybico*, quod et *Adriaticum* vocant.

“Nec aliter sensit Hieronymus in *Vita Hilarionis*, ubi medium Adrium pertranseunt ab Ægypti Parætonio ad Siciliæ Pachynum appulsuri. Sed ad rem id maxime est quod in Procopii *Vandalicis*, lib. i., insulæ Gaulus et Melita *Ἀδριατικὸν καὶ Τυρσηνικὸν πελάγος διορίζουσιν*, *Adriaticum et Tuscum pelagus disternant*. Scite, igitur, sacer scriptor et ex geographicorum usu e Creta Melitam delatos, vi ventorum ingruentium jactari dicit in *Adria*. Porro in eadem insula barbarorum nomine Pœnos ab illo designari docuimus quorum reliquiæ in agros hæserant. Oppidi denique non meminit, quia nihil erat necesse. Ita, Actor. 21. 1., Paulus appulisse narratur in insulas Coum et Rhodum, absque mentione urbium quas tamen utraque habuit insulæ cognomines.”

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#### IV.

##### ON THE ACCOUNT OF THE NIGHT MARCH OF THE PELOPONNESIANS.

(*Thucydides*, lib. ii. cap. 93.)

THE discovery of the inventories of the Attic navy clears up in a great measure the difficulties in the account given by Thucydides of the night march of the Peloponnesians across the isthmus of Corinth. They show, in the first place, that it was necessary that they should carry their oars, with all their appurtenances, along with them; because those belonging to the galleys were always taken out of them, and kept in separate storehouses when the ships were laid up; and, as the space between Megara and

the port at Minoa was walled in, the storehouses in this case were probably inaccessible.

The tables show, in the next place, that the oars of a trireme were of such dimensions as not to be too heavy to be carried by one man each.

Dr. Bishop, in a note on the oars of ancient triremes, appended to Arnold's edition of Thucydides, offers some explanatory conjectures which require to be noticed, because they have been to a certain degree admitted by subsequent writers. (*Thirlwall's Greece*, iii. 125.) He supposes that the tropoter (τροπωτήρ), instead of being a thong of hide to keep the oar to the peg or thole, was a coil of rope which "was used, certainly not as a fulcrum, but probably for the triple purpose of a counterpoise, a nut, and a loop;" and has given a figure of an oar of the same thickness throughout, with the rope coiled round it at the upper end, to act as a counterpoise to the extra weight of the oar outside of the ship. He assigns the following reasons for concluding with certainty that the tropoter could not be used as a fulcrum: — "The use of pegs at all is only a consequence of the rowlocks being constructed on the upper edge or gunwale." This is by no means so clear: unless the oar-ports were very small, a peg, and consequently a thong, would be as necessary in the under tiers as in the upper one. But even if the thongs were not required as fulcrums, they might be required to prevent the oar from being pulled away by the enemy; and, at all events, we cannot suppose that the upper tier oars were left behind; but, if they were not, the thongs or grummets must have been taken also. Thucydides, in his enumeration, evidently meant no more than that every thing was taken which was necessary to enable them to pull the galleys from Minoa to the Piræus. Without oars and thongs they could not have done so; and the thong could make no sensible addition to the weight. It is not quite so clear why they took the hyperesia, or

seat-covers. I agree with Dr. Bishop and Mitford, that it could not be that they might sit softer; but I cannot agree with the former, that it was to prevent their sliding upon their seats; their object was not to run a race, and that extreme nicety required where a few feet may be of consequence could be of none in a surprise. The hyporesium was a sheepskin with the fleece (*ὑπηρεσιον ἐστὶ κώας, κ. τ. λ.* Scholiast on passage). By rolling it up it became a cushion or pillow; and I suspect this was all that was allowed to the rowers for sleeping on. Hesychius and Julius Pollux inform us that it was synonymous with *προσκεφαλαιον* (Hesych. ad verb. Jul. Poll. lib. x. c. 40.); and it was resting upon this that our Lord slept in the storm on the Lake of Tiberias. (Mark iv. 38.) But we can as little suppose that on such an occasion as that related by Thucydides they would make preparation for sleeping as for sitting soft. Mitford supposes it may have been for the purpose of making oar-coats or bags to keep out the water (note to cap. xv. s. 11.), and refers to a marble in the Vatican, which is evidently the same as that described by Winkelmann, where the oars are represented with such an appendage, which was, no doubt, necessary in a heavy sea, but could scarcely be required between Minoa and the Piræus. But although a cushion or fleece would not be required in any of the supposed cases, there is one case where it would be of obvious utility, namely, placed between the oars and the shoulders of those who carried them: men who had to carry oars for five or six miles could scarcely dispense with a cushion; or they may have been required to muffle the oars, a common precaution in a surprise.

Dr. Bishop's conjecture respecting the tropoter is quite at variance with the evidence of ancient authors. Thus Julius Pollux tells us that "the tropoter is that by which the oars are bound to the scalmus or thole (lib. i. 87.),  
*ὅθεν μὲν αἱ κώπαι ἐκδεδένται σκαλμος, ὃ δὲ ἐκδεδένται τρο-*

πωτηρ; and Hesychius tells us they are bands made of hide, by which oars are kept in their places when they row : *η οί κατεχοντες τας κωπας δεσμοι δερματινοι όταν ελανωσιν, οί τροπωτηρες.*

Dr. Bishop observes that " There are two things to be particularly remarked in gunwale oars of a good construction : first, that the loom or part within board is very much thicker than the neck or part adjacent to the blade. Now it is a law in mechanics that the strength of a machine is to be measured by that of its weakest part. The increased size of the loom cannot add to the strength of the oar as a whole, but is, in fact, merely supplied as a dead weight." But it is only where the strain is equal that this law applies. The mechanical principle is, not that every part of a machine should be equally strong, but that every part should bear the same proportion to the strain which it is intended to bear.

The maximum of strain in an oar, so far as the strain arises from the force of the rower, is at the fulcrum; and in going towards either end of the oar, diminishes in proportion to the distance from the fulcrum till it becomes zero at either end. The strain, so far as it arises from the weight of the oar, is also a maximum at the fulcrum, and diminishes in going towards either end of the oar, till it becomes zero. This diminution is not, however, proportional to the distance from the fulcrum; and the strain at any point in the upper part of the oar is greater than the strain at the corresponding point in the lower part.

The increased thickness of an oar at its upper end is therefore requisite for strength, still more than it is for weight. A cylindrical oar, like Dr. Bishop's figure, would either be too weak or too heavy; it would break at the fulcrum long before there was any tendency to break at any other point.

If we consider the necessary thickness of a ship's side,



it is not easy to imagine that the oar-ports were small enough to serve as rowlocks; and the evidence points altogether the other way. We hear of spears being darted through the oar-ports. Herodotus tells us that the captain of a galley was pilloried for remissness in duty, by having his head pushed through the lower ports, *δια θαλαμῆς* (lib. v. cap. 33.); and the ports of the "Navicella" at Rome, which has all the appearance of being formed to a scale, are quite large enough for that purpose.

The weight of a *fir* oar of the dimensions mentioned in the Attic tables, I found to be between twelve and thirteen pounds; hence it could easily be carried on the shoulder.

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V.

EDITIONS OF AUTHORS REFERRED TO IN THE DISSERTATION ON THE SHIPS OF THE ANCIENTS.\*

APPIANI Opera. Tollii, 8vo, Amst. 1670.

Arriani Expeditio Alexandri. Raphelii, 8vo, Amst. 1757.

——— Periplus Euxini. Ap. Geog. Min. 8vo, Oxon. 1707.

——— Maris Erythrei. Ibid.

——— Epictetus. 8vo, Lips. 1799.

Arrian writes like a seaman, and even in his Epictetus uses sea phrases.

Athenæi Deipnosophistæ. 8vo, Arg. 1801.

See page 199.

Aubin, Dictionnaire de la Marine. 4to, Amst. 1702.

See page 159.

\* This List contains the titles of some works consulted, although not referred to in the text.

Bayfius, *De Re Navali*. 4to, Par. 1536.

——— *ib. ap. Gronovii Thes. Græc. xi. 567.*

This author supposes, but with doubt, that the three ranks of oars were on the same deck. He says: "Nec tamen verebor ingenue fateri mihi adhuc non liquere an hæc nostra conjectura vera sit." See Dissertation on ancient Ships, for his remarks on Artimon, p. 154.

Bechi, *Istoria dell' Origine e Progressi della Nautica Antica*. 8vo, Firenze, 1785.

Beechey (Capt. F. W.) *R. N., Expedition to the North Coast of Tripoli*. 4to, Lond. 1725.

In the Appendix there is an article on ancient ships avowedly taken from Potter: it contains, however, some good remarks on the rate of sailing of ancient ships. See page 179.

Begeri *Thesaurus Brandenburgicus*. Fol. Col. 1696.

See page 177.

Berghaus, *Geschichte der Schiffartskunde bey der vornehmsten Volkern des Alterthums*. 8vo, Leips. 1792.

See remarks on this work, note to page 143.

Bökh (Aug.), *Urkünden über das Seewesen des Attischen Staates*. 8vo, Ber. 1840.

In excavating the foundation of a building in the Piræus in 1834, a number of inscriptions were discovered, which proved to be inventories of the appurtenances (*σκευη ξυλωνη* and *σκευη κρεμαστη*) of each ship of the Attic navy, which were laid up in storehouses, specifying those which were serviceable and those which were not. We have thus, in the most authentic form, a great mass of information respecting the ships of the ancients.

Breydenbach (Erhard), *Peregrinatio in Terram sanctam*. Fol. Mogunt. 1486.

The earliest printed voyage which is illustrated with prints. The figures of shipping are correct in the details. The most important will be found in the article "Ship-building" in the *Encyclopædia Britannica*, 4th edit.

Calcagninus, *De Re Nautica*, ap. *Thes. Græc. Gronovii*, xi. 758.

Carli (Il Conte), *Delle Triremi, Quinqueremi, ec.* Opp. t. ix.

Count Carli takes nearly the same view as Bayfius respecting the arrangement of the rowers.

Charnock (John), *History of Marine Architecture*. 4to, Lond. 1801.

Gives the lines of the *Navicella* at Rome.

Complaynt of Scotland. 16mo, 1542; reprinted and edited by Leyden, 8vo, Edin. 1802.

Contains a curious description of a ship weighing anchor and setting sail.

Crescentio (Bartolomeo), *Nautica Mediterranea, nella quale si mostra la Fabbrica delle Galee, Galleazze, e Galeone*. 4to, Rom. 1607.

A correct description and representation of the ships of the period.

Creuze (A.), *On Ship-Building*. 8vo, Edin.

From the *Encyclopædia Britannica*.

Description of an antient Galley. *United Ser. Mag.* May, 1831.

This is evidently the *Palestrine galley*, figured and described by Winkelmann, *Ant. ined.* ii. pl. 207. The author supposes the rowers stood side by side on external gangways, and pulled with the oar vertical.

Deslandes, *Essai sur la Marine des Anciens*. 8vo, Par. 1768.

Desroches, *Dictionnaire des Termes de Marine*. 4to, Par. 1687.

Doletus (Steph.), *De Re Navali*, *Gronovii Thes. Græc.* xi. 628.

Falconer (William), *Marine Dictionary*, by Burney. 4to, Lond. 1815.

——— *Shipwreck*. 8vo, Lond. 1810.

Fabretti, *De Columna Trajana Syntagma*. Fol. Rome, 1683. Cap. V. *De remorum ordinibus in veterum triremibus et aliis multiremibus navigiis*.

Excellent illustrations from an ancient marble in the church of S. Lorenzo fuori le Mure, which have been copied by Montfaucon and subsequent writers.

Gyraldi (Lylii), *De Re Nautica*. 12mo, Bas. 1540.

——— *Idem. Opera*, fol. Amst. 1696, p. 601.

Explains ancient terms, but offers no conjecture respecting the arrangement of the rowers.

Hasæus, *De Navibus Alexandrinis*, Crit. Sacra, tom. xii. p. 717.

Howel (John), *Essay on the War Gallies of the Antients*. 8vo, Edin. 1826.

See page 186.

Jal (A.), *Archæologie Navale*. 8vo, Par. 1840.

The chief value of this work is derived from the original documents inserted in it. M. Jal, as he informs us, was educated at a naval school; he therefore understands his subject. See page 160, &c.

Isidori Hispalensis *Opera*. Fol. Par. 1601.

Leo Imperator, *Tactica ap. Meursii Opera*, fol. Flor. 1745, tom. vi. p. 828.

Lescallier, *Vocabulaire des Termes de Marine*. 4to, Par. 1777.

Meibomius, *De Fabrica Triremium*. 4to, Amst. 1671.

The internal arrangement of this author has been adopted by Witsen, and by Potter in the illustrations of his *Grecian Antiquities*. He has shown that by placing the rowers of the different tiers alternately nearer and farther from the ship's side, the vertical distance between them need not exceed eighteen inches. He places the upper rank next the side; but it would be impossible to pull oars as he has represented them, from the

necessary disproportion between the length of oar outside and inside of the vessels. See page 198.

Melville (General), On the Rowers in Ancient Gallies, in the Appendix to "Pownall on the Study of Antiquities." 8vo, Lond. 1782.

See remarks on, p. 185.

Montfaucon (Bernard de), *L'Antiquité expliquée*. Fol. Par. 1719, tom. iv. pt. 1.

Compiled from Scheffer, Fabretti, and Potter. He, however, gives an original engraving of the Seville marble, representing a naval combat, pl. 228.

Morisoto, *Orbis Maritimus*. Fol. Div. 1643.

Nortumbrio (Dudley, Duca di), *Arcano del Mare*. Firenze, 1661.

Good figures of ships of the period.

Opelius, *De Fabrica Triremium*, ap. Græv. Thes. tom. xii.

Palmerius, *Exercitationes in Auctores Græcos*. 8vo, Lug. Bat. 1669.

Contains good remarks on the arrangement of the rowers.

Pantero Pantera, *L' Armata Navale*. 4to, Rome, 1614.

Contains a vocabulary of Italian nautical terms of the period. The word Artimone does not occur in it. The author's remarks on the trireme are not very intelligible: he says it was "così chiamata delle tre remi con che si vogava ad ogni banco."

Pitture Antiche di Ercolano. Fol. Nap. 1763.

Plinii *Historia Naturalis*. 8vo, Lond. 1829.

Pollux (Julius), *Onomasticon ex Recensione Bekkeri*. 8vo, Ber. 1846.

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Lederlini et Hemsterhuisii. Fol. Amst. 1706.

Rennell (Major), *On the Geography of Herodotus*. 4to, Lond. 1800.

Contains remarks on the rate of sailing of ancient ships, p. 678. See page 179.

Le Roy (D.), Mémoires sur la Marine des Anciens, Hist. de l'Acad. des Sciences, t. xxxviii. p. 542.

————— La Marine des anciens Peuples expliquée. 8vo, Par. 1777.

————— Les Navires des Anciens considérés par Rapport à leurs Voiles. 8vo, Par. 1783.

————— Nouveaux Recherches sur les Navires des Anciens, Mém. del Institut, an vii. p. 478.

See remarks on this author in note to p. 143.

Saverien, Dizionario di Marina. 4to, Ven. 1769.

See page 159.

Savile (Sir Henry), Translation of Tacitus. Fol. Lond. 1604.

Appended to it is "A View of certain military Matters for the better understanding of the ancient Roman Stories," which contains an account of the different classes of ships.

Schefferus, De Militia navali Veterum. 4to, Upsal. 1654.

————— De Varietate Navium, Gronovii Thes. xi. 770.

See remarks on this author, p. 155. His work "De Varietate Navium" is confined to the rowing galleys.

Sovereign of the Seas (Account of). Lond. 1673.

For the title of this curious work, see p. 149. note.

Stewechius, Commentarius ad Vegetii Libros de Re Militari. 8vo, Ves. 1670.

The author supposes, with Bayfius and other authors, that the rowers were on the same level, in groups of seven each. His descriptions are not very intelligible, and his figures in illustration unsupported by any authority.

Strutt (Joseph), View of the Manners and Customs of the English, &c., till the time of Henry VIII. 4to, Lond. 1774-6.

Gives good figures of mediæval ships from the drawings which

illustrate MSS. The paddle rudders appear as late as the reign of Stephen.

Vegetius, *De Re Militari*, ap. *Veteres de Re Militari Scriptores*. 8vo, Vesal. 1670.

Treats of naval warfare. The largest galleys in his time had five ranks; but his descriptions afford no clue to the mode in which the rowers were arranged.

Virgilii Opera, Lat. Ital. Fol. Rome, 1761. Illustrated with vignettes from the antique.

See page 170.

Vitruvius. Poleni, 4to, Utini, 1829.

Vossius (Isaac), *Observationes variæ, de Triremium Constructione, &c.* 4to, Lond. 1693.

———— Idem, *Grævii Thes.* tom. xii.

See page 185.

Us et Coutumes de la Mer. 4to, Rouen, 1672.

See page 72.

Willet (Ralph), *On British Naval Architecture*, *Archæologia*, xi. 154.

Winkelmann, *Monumenti antiche inedite*. Fol. Rom. 1783.

Witsen (Nicolaes), *Aeloude en Hædendaegsche Scheepsbouw, &c.* Fol. Amst. 1671.

That is, "Ancient and modern Ship-building." This work gives a good account of the state of naval architecture, and the mode in which ships were rigged, when the work was written. The author, however, cannot have had any practical knowledge of his subject, otherwise he would not have given such absurd restorations of ancient ships as he has done. Amongst others, he has given a restoration of the great galley of Ptolemy Philopator. It is said by Athenæus to have been 280 cubits (420 feet) long. Taking this as a scale, Witsen's representation is that of a ship 100 feet high above the water, with a palace on her deck nearly 100 feet more, or 200 feet in all. All his other restorations (for he has given several) are equally absurd. In

the appendix he gives the figures of Meibomius, published at Amsterdam the same year as Witsen. Baron Zach, in his correspondence, speaks of this work as follows:—“M. Le Roy, qui a beaucoup travaillé et écrit sur la marine, et sur l'architecture navale des anciens, n'a point connu l'ouvrage de Witsen, apparemment parcequ'il est écrit en Hollandois, langue connue encore moins que l'Allemande. Mais sur tout parceque ce livre est devenu si excessivement rare qu'on ne le trouve pas même en Hollande à aucun prix; il y en a cependant un exemplaire à la bibliothèque du Roi à Paris. Tout ce qui regarde la marine des anciens y est traité avec une exactitude et une érudition égale.” — *Zach*, ix. 97. There are copies of this work in the British Museum and in the library of the Royal Society.

THE END.



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# NEW WORKS

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MESSRS. LONGMAN, BROWN, GREEN, AND LONGMANS,  
PATERNOSTER ROW, LONDON.

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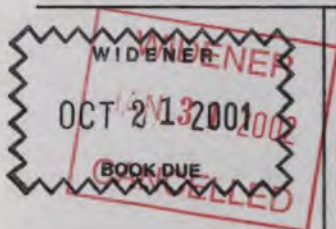


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